ISSUE BRIEF

Can We Be Healthy While Our Economy is Unhealthy?

Mark Holmes, PhD

The last 12 months have been a time of tremendous economic upheaval and uncertainty. By almost any measure, we are in the midst of an almost unprecedented economic downturn. In May 2009, North Carolina's unemployment rate was at 11.1%, the highest since February 1983, when it was 10.2% (see Figure 1, page 322). There are more unemployed people than ever before in North Carolina —double the number from March 2008— and an additional 0.9% are likely to be "discouraged workers" who have given up searching for employment.[1] In addition to being jobless, many are losing their homes: in June 2009, one in every 326 North Carolina households were in foreclosure.[2] Due to decreased household and corporate incomes, the state budget faced up to a $4 billion shortfall.[3] Indeed, most popular media descriptions of our economic condition often include the phrase "since the Great Depression," underscoring that we are facing conditions not seen in the last 70 years. Although there are some early positive signs, a number of economists remain bearish on our short-term and intermediate economic future.

Immediate Impact of the Economic Downturn

As we struggle with our economic challenges, our health needs continue to increase—despite fewer resources to allocate to health care. Businesses, some forced to layoff employees just to survive, must make difficult decisions about health insurance coverage for employees. Households with diminished income may forgo purchasing health insurance or prescription drugs to meet their mortgages. A June 2009 survey by the Kaiser Family Foundation found that 26% of respondents reported not filling a prescription due to cost, and 19% cut pills in half or otherwise lowered the dose.[4] Roughly two million North Carolinians receive their health insurance from the state of North Carolina through Medicaid, NC Health Choice, or the State Health Plan; with the tight budget, continuing to meet the needs of these people becomes more and more challenging. Well-documented relationships between household income, labor force status, out-of-pocket cost of health insurance, and the likelihood of purchasing insurance suggests that as incomes fall, as fewer people work full-time, and as employees face increased costs for coverage the proportion of North Carolinians with health insurance will decrease.

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Unfortunately, real-time data on the uninsured rate are difficult to obtain. One of the most widely recognized sources is the Annual Social and Economic Supplement to the Current Population Survey (CPS), administered in March of each year to roughly 4,000 North Carolinians. The latest survey, released in August 2008, asked in March 2008 about coverage for 2007; thus, the CPS data reflect conditions before the existing economic downturn. In order to develop a more accurate picture of current circumstances, researchers from the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill and the North Carolina Institute of Medicine exploited the known link between health insurance coverage in a state and the state unemployment rate, along with associations with health care cost trends, population increases, and Medicaid coverage policy. Based on the January 2009 unemployment data, these researchers concluded that the number of uninsured in North Carolina rose by 22% from 2007 to January 2009, the largest increase in the country.[5]

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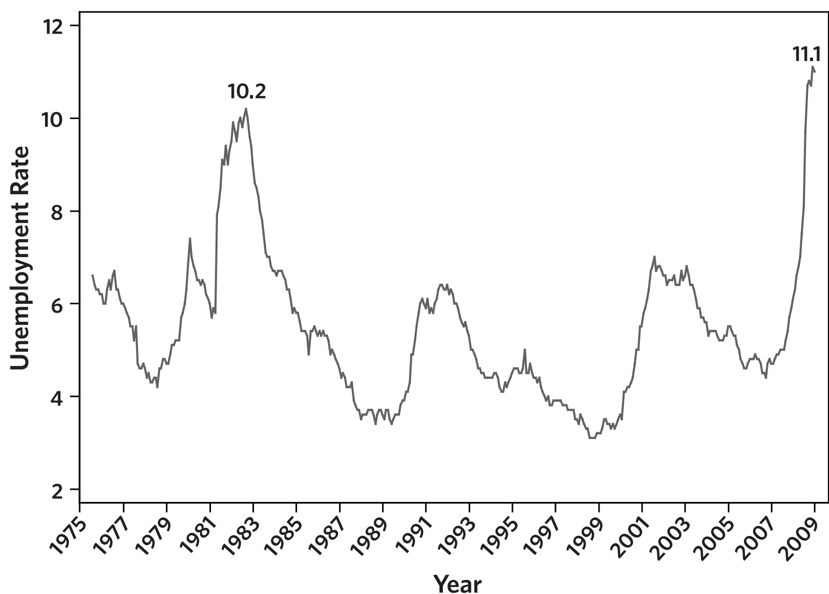
Figure 1.
North Carolina Unemployment: 1976-2009



Source: Bureau of Labor Statistics. Local area unemployment statistics: North Carolina January 1976-June 2009. Seasonally adjusted data. January 2004–December 2008 use new controls; June 2009 data preliminary. Available at: http://www.bls.gov/lau/. Accessed July 21, 2009.

Nationally, 12% of respondents indicated they had lost their health insurance as a result of the economic recession; these respondents indicated that this loss was "a serious problem."[4]

In fact, of the three components of the "iron triangle of health care"—cost, quality, and access—access has received by far the most attention in the popular media. Ferrel Guillory discusses the important role of the media in informing the public in his commentary in this issue of the *Journal*. That access would receive the most attention is not altogether surprising: health insurance is the easiest of the three for most people to understand and they generally know whether they are insured. The public often feel that the quality of health care they receive is good; in a recent poll, 83% of respondents were satisfied with the quality of care they receive.[6] But consumers can't always estimate the total cost for many health care services. A *Wall Street Journal* Online/ Harris Interactive Health-Care poll found that average consumers underestimated the cost of major surgeries, like hip replacement (underestimating by nearly 60%) and cesarean section (underestimating by 50%).[7] And although they do not always understand the details of their health insurance—in one study, 30% of privately-insured respondents inaccurately indicated whether they were in an HMO[8]—people generally understand health insurance and what this means in regards to their ability to access health care services.

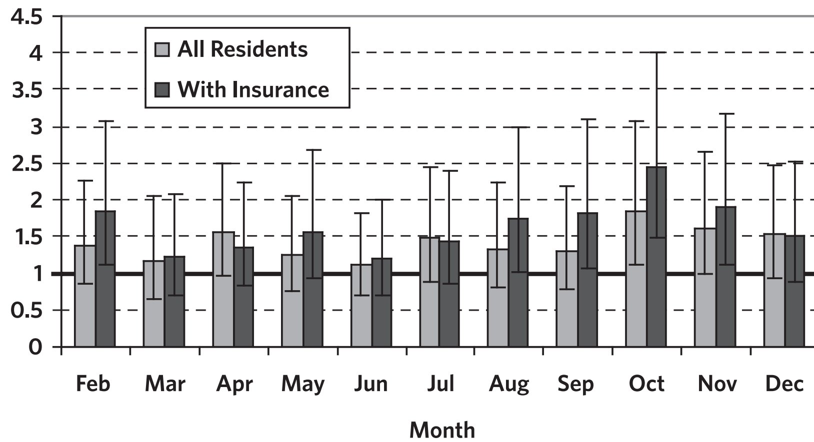
Comprehensive reform of the type being discussed at the federal level depends critically on reform of all three vertices of the triangle, as it is difficult, for example, to improve access unless cost is also addressed. Perhaps learning from the experience of the early 1990s, the Obama administration has made educating the public on the role of health care costs a major element in its efforts to promote comprehensive health reform. A proposed major investment into comparative effectiveness research, which studies common treatments for health conditions to see which are most effective, is an example of the dedication of Congress and the administration to controlling health care costs. This effort is largely driven by the Office of Management and Budget Director Peter Orszag's experience at the Congressional Budget Office and his understanding of controlling health care costs in balancing the federal budget. White House Chief of Staff Rahm Emanuel's now-famous line that "a crisis is a terrible thing to waste" underscores that efforts at comprehensive health reform may at least partly be driven by our current recession.

As people lose their insurance coverage, their access to care may be reduced, and some may postpone necessary care, seek care from safety net providers, or visit hospital emergency departments (EDs) because their needs are urgent. This may lead to increased costs and poorer control of chronic diseases subsequently leading to more care that could have been avoided if the chronic disease were more effectively managed. Data from the Centers for Disease Control and Prevention's 2008 Behavioral Risk Factor Surveillance System (BRFSS) indicate an increase near the end of 2008 in the percent of North Carolinians who indicate they "could not see a doctor because of cost," with the largest increase occurring in October, about the time the financial crisis was manifesting itself (see Figure 2). Surprisingly, respondents who indicated they currently had coverage showed a larger increase than the uninsured in these months; this may suggest that the response may have been less about coverage and more about addressing the economic uncertainty of the time.

Effects on Health

Postponing care can lead to poorer health. The evidence supporting the link between having good access to care and improved health outcomes is well-known.[9] Assuming there is a downturn in coverage due to the economy, diminished access will have negative health effects. In this issue of the *Journal*, Steve Cline outlines some of these potential effects in his commentary. Other research has identified some *positive* effects—mostly on behavior—during poorer economic periods. This counterintuitive result is based on simple economics—

Figure 2.
Risk of "Could Not See a Doctor Because of Cost" Increased at the End of 2008, Particularly Beginning in October

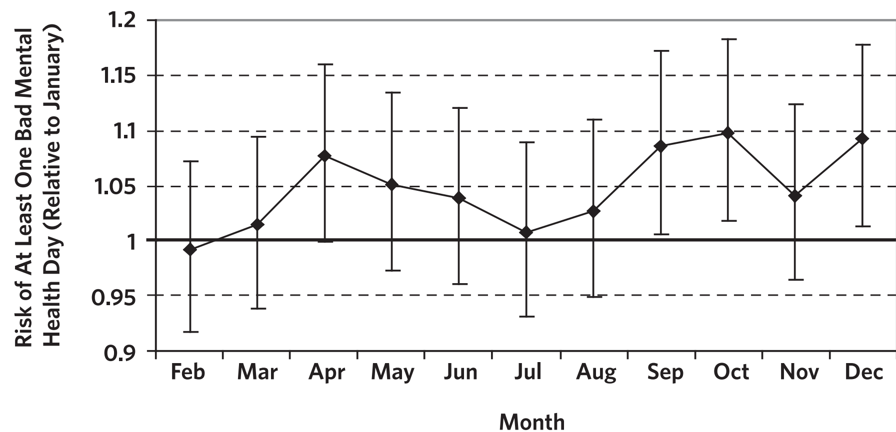


Data Source: Behavioral Risk Factor Surveillance System (2008). January as referent month. Adjusted for age (quadratic), race, income, and whether currently have health coverage. North Carolinians only. Excludes those 65 or over. 95% confidence intervals shown.

for example, walking, playing basketball, and other similar activities are free, and smoking cigarettes costs money. Christopher Ruhm reviews some of his research in this area in his sidebar.

The recession has had effects on other aspects of health beyond the physical domain, as the turmoil of uncertainty can dramatically impact people's mental health and well-being. Some may experience heightened anxiety, some may suffer depression, and some may use substances to cope. National BRFSS data for 2008 show that the risk of having at least one day of "bad mental health" increased in September, October, and December, with respondents almost 10% more likely to report having at least one "not good" mental health day in those three months than in the preceding year (see Figure 3). This is a trend consistent with heightened anxiety due to the recession and financial crisis occurring in mid-September. In her commentary, Kim Franklin discusses early trends in utilization for mental health and substance abuse services.

Figure 3.
Nationally, People Were More Likely to Indicate Bad Mental Health Days in the End of the Year Than in the Beginning



Source: Behavioral Risk Factor Surveillance System (2008). January as referent month. Adjusted for age (quadratic), race, income, and whether currently have health coverage. Includes all US respondents. Excludes those 65 or over. 95% confidence intervals shown.

Households may also forgo dental care. Because fewer people have insurance for dental services than for medical services,[10] dental services may be more susceptible to business cycles than medical services, as households are paying out-of-pocket for dental care. A June 2009 survey found that over one-third of respondents (or a family member living in their household) had skipped dental care or checkups.[10] Just as in the other domains, decreased use of prevention services will likely lead to increased demand for more urgent, acute needs. For example, one study in Texas found a 121% increase in visits to the emergency department for pediatric dentistry concerns from 1997-2001.[11] Almost 75% of the ED visits were due to nontraumatic concerns, and 68% of admissions were a result of cavities. A study in Ontario found over three-quarters of ED visits for dental concerns were nonurgent.[12] Thus, ED utilization for nonurgent dental concerns are considerable and likely to increase as access to dental care decreases during a recession. M. Alec Parker discusses the trends in dental services in his commentary in this issue of the *Journal*.

Finding Lower Cost Providers

Another option for individuals who find themselves without health insurance coverage is to use safety net providers. North Carolina's safety net system is one of the strongest in the country, but it has seen a tremendous increase in utilization since the beginning of the economic downturn. One clinic reported its "time to next appointment" increased from the

same day to a staggering 25 days in just three months.[13] In order for the existing system to meet the increased needs of the communities they serve, individual safety net providers will need to work together to develop a more seamless, coordinated system of care for the uninsured in the community. Two major state initiatives—HealthNet (funded by the state) and the Care Share Health Alliance (funded by a consortium of funders including the NC Health and Wellness Trust Fund, NC Office of Rural Health and Community Care, Blue Cross and Blue Shield of North Carolina Foundation, The Duke Endowment, and Kate B. Reynolds Charitable Trust) are helping communities develop coordinated systems of care to facilitate, among other things, medical homes for the uninsured. In this issue of the *Journal*, Jennifer Henderson and Judith Long outline one community's approach to developing a collaborative, multiprovider safety net approach. (More information on the Care Share program can be found in this issue's Spotlight on the Safety Net, page 373.)

Currently, 20% of the uninsured view the emergency department as their primary provider.[14] Emergency departments serve a vital role in the North Carolina safety net system, but they may not always be the most cost-efficient setting for providing nonurgent care. The Emergency Medical Treatment and Active Labor Act (EMTALA) requires hospitals participating in Medicare to screen and stabilize patients presenting with an emergency medical condition, regardless of their ability to pay. One consequence of this is high utilization (and associated costs) by individuals with conditions not requiring treatment in an emergency department. Due to EMTALA, however, hospitals may be reluctant to redirect individuals with nonurgent needs to a more appropriate setting because of potential liability or regulatory consequences with inappropriate redirection. With a great deal of the discussion surrounding national health reform turning to costs, identifying a mechanism to preserve Congress's intent of EMTALA to provide access to emergency treatment while ensuring that the treatment is delivered in the most appropriate setting would help control costs. Estimated use of EDs for nonurgent complaints range from 33% to 50%;[15] one study found that roughly half of those using the ED for a non-urgent condition had a primary care physician; roughly half of these thought that the ED was better for unscheduled care and more efficient, although 40% thought they would have paid less at a PCP.[15]

The difficulty, of course, is developing the appropriate mechanism that accomplishes the goal without adversely affecting the health of the patients. One study found that alternative methods of classifying whether a visit was urgent varied widely in their assessment.[16] In his sidebar in this issue of the *Journal*, William Atkinson outlines some features of how this might operate. Another way to help manage inappropriate use of the emergency department is to intervene more upstream by successfully managing chronic conditions in a clinic setting. This could help dramatically reduce the use of ED services. Beyond the improvement in health for the individual, such a program may be cost-saving for the health system if patients' health could be improved sufficiently to limit the number of urgent conditions. Kristin Wade and colleagues outline a program at Carolinas Medical Center that addresses ED utilization rates and share some early results.

Investments and Marshalling Resources in a Time of Uncertainty

Of course, hospitals and health systems provide services in other settings beyond the emergency department. Some of our larger health systems have budgets exceeding $1 billion in operations that encompass multiple settings and multiple health care services. As the recession has developed, all our hospitals and health systems have been forced to address the changing economic circumstances and their effect on multiple aspects of these enterprises including not only health care delivery, but also the elements affecting every other organization —access to capital, cash management, and labor costs (including number and mix of employees, salary, and benefits). In addition, like other actors in the health care system, hospitals are making strategic decisions against the backdrop of health reform. Given the expected increase in the uninsured, a decrease in health status, and increased use of the safety net system, the financial picture for a health care system such as UNC Health Care—which includes our state's primary safety net hospital—would be expected to have been dramatically affected over the past year. In his commentary, John Lewis discusses this issue in more detail.

Meanwhile, despite these recent events, our population continues on its secular trend of growing older and sicker, which is resulting in an increased demand for health care services. Furthermore, Americans' well-chronicled appetite for the newest and most promising (and often most expensive) treatments means hospitals and health systems may be looking to expand their technology capabilities to stay competitive.[17] But with a tight credit market, decreased revenues, and an uncertain future, how can hospitals and health systems ensure they have access to the capital they need to meet expanding health care needs? John Franklin discusses recent trends in the capital market in his sidebar in this issue of the *Journal*. Meanwhile, the market for the primary resource used in delivering health care services—labor—is experiencing its own turmoil. Employment in the health care sector has certain advantages, especially in an increasingly global economy. Because it is a "hands-on" service, it is primarily delivered locally, meaning it is difficult to export jobs, and the demand for health care services is less elastic than most other goods and services, causing it to be less responsive to booms and busts of the economy. Because of this, a cadre of North Carolina leaders have focused on facilitating expansion of the industry and facilitating worker retooling and career ladders to help with recently laid-off workers. Erin Fraher and colleagues describe some of these issues in her commentary.

Impact on Government and Philanthropy

As households have faced pinched budgets due to declining revenue and increasing costs, so have governments and businesses. Just as households may find it natural to postpone long-term investments (e.g., saving for college or retirement or performing home improvements) to ensure short-term needs such as mortgages and food can be met, governments and businesses often take similar approaches.

A different approach has been taken by Congress through the American Recovery and Reinvestment Act (ARRA). The ARRA was primarily intended to stimulate the economy by injecting billions of dollars into the economic stream, with a large portion of the funding (e.g., transportation funding) being allocated within weeks of enactment. But the ARRA also invests with a view to the long run system by developing our health information technology (HIT) system. The ARRA contains funding of about $21 billion to, among other activities, incent providers to purchase and "meaningfully use" HIT systems in their offices. Other elements include the development of a statewide plan for health information exchange, allowing providers to have more information about their patients readily available thus reducing delays and unnecessary duplication of services. Governor Perdue convened a HIT Strategic Planning Task Force, chaired by Steve Cline, to develop a statewide plan.[a] The promise of HIT to improve quality efficiency has been discussed for years, but like most network-based technologies, the value-added increases exponentially in the number of providers who can access the information in real time. Therefore, an efficient health information exchange is only effective if there are many providers who can access the data; thus incenting private providers to adopt HIT is a critical investment of the ARRA. Sam Spicer outlines the key components of the incentives in his commentary.

As discussed earlier, the demand for North Carolina's health care safety net services has increased dramatically. Many of these safety net providers depend on local philanthropies for critical support. Meanwhile, the call for national health reform and increased efficiency within our system has led to an increased focus on developing innovative models that improve the delivery of health care in our system. Historically, North Carolina researchers and practitioners have helped develop some nationally recognized innovative models that have revolutionized some of the ways health care is delivered; many of these models were at least partly supported by a North Carolina foundation on a pilot basis to allow incubation of breakthrough ideas. Despite the increased pressures for supporting safety net providers and developing programs, the available resources for philanthropic purposes have decreased due to shrinking investment portfolios. Thus, funders face that unfortunate reality of the business cycle—just when demand is highest, the available funds are at their lowest. How do philanthropies balance these increased demands with the discipline to not spend the "seed corn" of the endowment? Eugene Cochrane outlines one funder's perspective in his commentary.

Investing in the Future

We, as a state, certainly face many economic challenges in our current environment, and circumstances may worsen before they improve. Our health care system faced many pressing needs including mental health reform on the state level, cost control, access expansion, and quality improvement throughout the system prior to the downturn. Since then these needs have only increased and expanded. Despite this, however, North Carolina innovations guide the way for us to find better value during this period of increased demands. Our state has been on the forefront of viewing population health in an "investment" framework—investing in prevention, case management, and quality improvement—to help bend the cost curve to maximize our ability to get better value with our health care dollar. As our economy recovers and demand and resources return to more historical levels, we will be in an excellent position to make many of the systemic changes that we acknowledge needed to be done in the past and work towards making North Carolina the healthiest state in the nation. **NCMJ**

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a This plan is available at http://www.ncrecovery.gov.

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