
The Triological Society 2011 Presidential Address

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The Triological Society 2011 Presidential Address was presented at The Triological Society's 2011 Combined Sections Meeting in Scottsdale, Arizona, Thursday January 27–29, 2011, by Gerald Berke, MD. The address captures the president's inspiration for the annual address as the past, present, and future of otolaryngology. A review of the financing and economics of health care in the United States over time is presented, and the future of health care with reference to otolaryngology is discussed. The address focused on the percentage increase in gross domestic product assigned to medical care in the United States owing to the emergence, adoption, and widespread diffusion of new medical technologies and services. It showed that a significant proportion of the expense goes to hospitals and physician/clinical services. It refuted many of the current criticisms of medical care in the United States, pointing out that neonatal death rates in the United States include all gestational ages, but many countries only use full-term births in their statistics; also, longevity is excellent when deaths due to motor vehicle accidents and homicides are adjusted. Furthermore, survival rates for common malignancies and myocardial infarctions are better in the United States than in many countries. The address related the president's memories of medical care in the United States as an intern and young resident. It went on to discuss the concept of treating diseased organs *ex vivo* and reimplanting them without systemic side effects within the next 25 years but cautioned that future medical advances may be moderated by a reliance on evidence-based studies before new technologies can be adopted. Finally, it emphasized physician's altruistic motivations for choosing this profession despite future economic realities in coming years.

Key Words: US health care, financing, economics, Triological Society Presidential Address.

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INTRODUCTION

Good morning. This is a wonderful honor and truly the pinnacle of my career. I can honestly say that it really does not get any better than this. Although for those of you who know the Beatles song, "Getting Better" on the Sgt. Pepper's Lonely Hearts Club Band album, as soon as Paul McCartney sings, "I've got to admit it's getting better, a little better all the time," you can hear John Lennon in the background quietly saying, "It can't get no worse." I probably heard that song a hundred times before someone informed me about that hidden phrase. Was John just trying to be a smart aleck? Or was he pointing out in his inimitable way that with the good comes the bad? No matter how wonderful something is, there is always a downside. Sorry, John, but I can't think of a downside to being the president of the Triological Society. One does have to endure endless

preflight videos showing you how to secure your life vest and oxygen mask, and there are a lot of fattening dinners with too much alcohol.

I guess for me the most intimidating aspect of being the president is deciding what to speak to you about this morning. In years past there have been so many erudite lectures that it is virtually impossible to think up an original, thoughtful speech. In fact, I've been worrying so much, that I actually had a dream about it. No, not like Martin Luther King Jr.'s dream; it was kind of a semiconscious dream state with recollections or memories reminiscent of Dickens's story *A Christmas Carol*, but about the past, present, and future of otolaryngology. And in that dream I saw myself sitting as a young man, in the last row of the seventh floor auditorium at the Center for Health Sciences at UCLA, during surgery grand rounds when I was an intern in 1978. I always sat in the last row, because I could doze off and there was less chance of being called on and pimped. But on this day in my dream, I could see the founder and chair of surgical sciences (Fig. 1), Dr. William Longmire, saying, "Dr. Berke, Berke wake up, describe the boundaries of Hesselbach's triangle." "Well, gee, Dr. Longmire, I know you were Blalock's fellow and participated in and probably performed the first successful surgery on a blue baby, and I know I should know this...but I'm going into ENT."

Fortunately, that episode never happened to me, but I did recall in my dream hearing a talk by an expert

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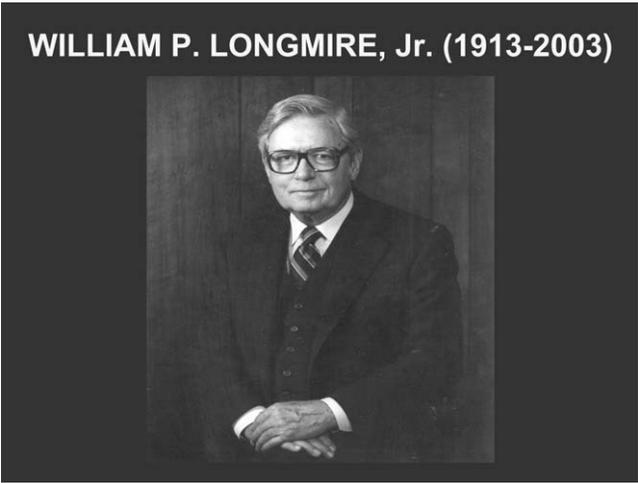
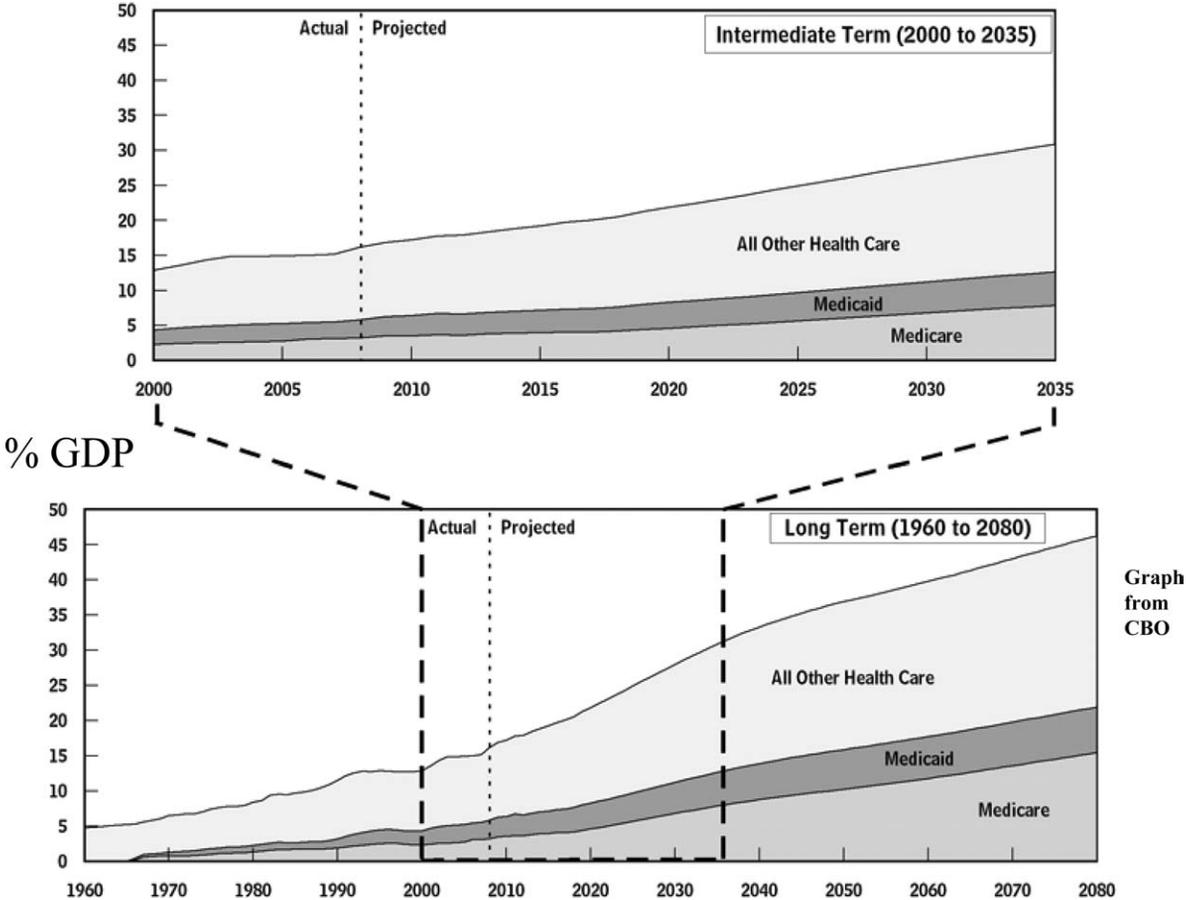


Fig. 1. Dr. William Longmire, Founder and first chair of Surgical Sciences at University of California, Los Angeles.

on health-care economics at grand rounds in 1986. He was brought in to discuss the future of how we as Americans would pay for our care and what changes to expect. I could see the graph he showed of the percentage of gross domestic product, or GDP, assigned to

medical care in the United States. I remember him saying that medicine now consumed 12% of the GDP and that this figure could not possibly go any higher without severe consequences for the economy and that something adverse was going to happen.

You can see that today it is 17% of the GDP (Fig. 2), and I'm sure the same expert, if he were still alive, would be saying, "It can't go any higher, because something really bad is going to happen unless we make drastic changes." Actually changes did occur after 1986. They included the development of HMOs, PPOs, and contracting, and these changes stabilized the rate of growth until the end of the 1990s.¹ However, when I tried to find out what accounted for the 5% rise in the percentage of GDP in the last 25 or so years, I found that it was not an expanding aging population as I had thought, although aging baby boomers will become more of a factor as they hit their mid-60s.¹ I found out that the explanation for the increase in national health-care expenditures is so obvious. As physicians, we experience it every day. The most important factor contributing to the growth of spending for health care in recent decades has been the emergence, adoption, and widespread diffusion of new medical technologies and services. Many of these innovations rely on costly new drugs, equipment, and skills that have allowed us to diagnose and treat



Graph from CBO

Fig. 2. Change over time in the percentage of gross domestic product (GDP) consumed by healthcare expenditures in the United States. Y axis represents percentage of GDP. Data from the Congressional Budget Office (CBO).

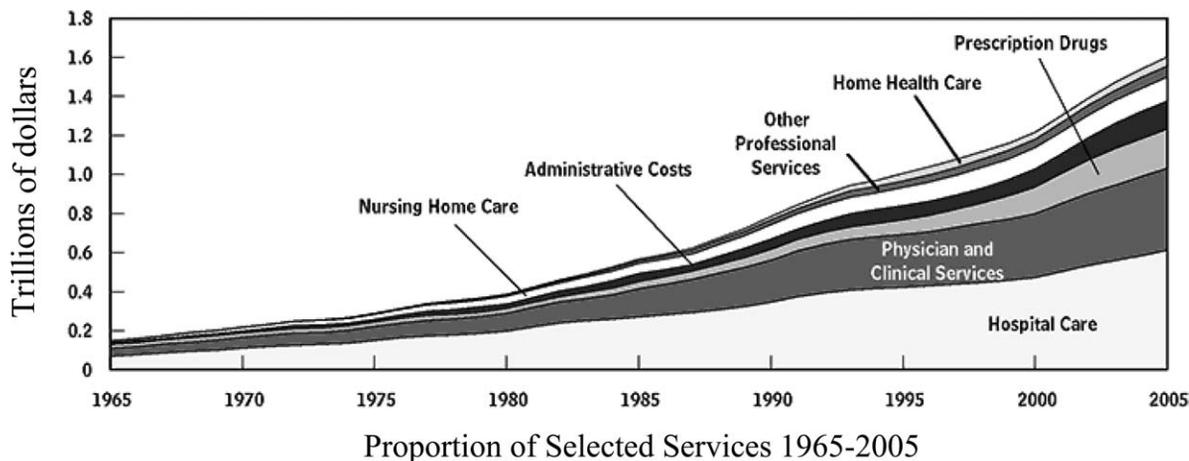


Fig. 3. Changes over time in the proportion of health-care spending for selected services, 1965–2005. Y axis represents trillions of U.S. dollars. Data from the Congressional Budget Office.

illnesses in ways that previously were impossible. Although technological advances can sometimes reduce costs, in medicine, such advances and the resulting changes in clinical practice have generally increased spending.¹

I should add that for the last several years, the rate of increase in national health-care expenditure has been the lowest in five decades. That's good news, but unfortunately, due to the severe contraction in overall GDP from the recession, the percentage of GDP consumed by health care actually went up.²

Figure 3 shows the proportion of national health-care expense for selected services and supplies over the years. It is important to note that a significant proportion of the expense goes to hospitals and physician/clinical services. It is sobering to learn that in the years when health-care expenditures showed the slowest growth, these two categories expanded the least.³ The implication is that controlling growth requires controlling physician's reimbursement as well.

Oh yes, and the lecture I heard in 1986 also had many of the same critical comments that we frequently hear today, such as, "The neonatal death rate in the United States is as bad as in a third world country, and the quality of health care in the U.S. is 37th in the world, behind Costa Rica,"⁴ although I looked it up, and we are slightly ahead of Slovenia and Cuba. Of course the United Nations World Health Organization compiles these statistics from data that gloss over differences in definitions of a "live birth" across countries, so that direct comparisons between countries may be misleading.^{5,6} For example, in the United States, we count all births no matter what the gestational age is, but many countries only use full-term births in their statistics.

I am sure you saw the recent finding of the National Research Council that longevity in the United States is less than in other wealthy nations because of smoking.⁷ In fact, when data are adjusted for motor vehicle accidents and homicides, the United States just about leads the world in longevity, which is especially significant considering that we as a nation are suffering

from an obesity epidemic, which has negative effects on longevity and increases utilization of health care services and costs.^{8,9}

Statistics like these may also be skewed by the fact that we are a very large country with very diverse cultural and economic demographics, so that broad generalizations are not all that informative. Because generalizations do not tell you much about the quality of health care in a country, some authors have recently chosen to look at how individual diseases are managed in different countries. Apparently, according to the Organization of Economic Cooperation and Development, survival rates for 13 of the 16 most common malignancies and myocardial infarctions are the best in the United States.^{10–14} Also, we lead the world in cancer screening and responsiveness to individuals with medical complaints.¹⁵ We don't often hear these laudatory comments about our health care, but these facts are obviously appreciated by persons from many other countries who come here to receive care for serious illnesses. If it seems as though I am commenting on issues that have appeared relatively recently on the medical horizon, in reality we are still debating topics that have not changed much in 25 years.

In dreaming about my life as a young physician, what else did I remember? For those of you in the audience who are my age or older, you already know this, but I would like to remind my younger colleagues so that they can get a better perspective on what has changed and how it may have affected the economics of health care. Surgical procedures were less complicated and less prolonged. For example, 25 years ago we had little understanding of the microscopic neurovascular anatomy that has led to advances in reconstructive techniques and reinnervation procedures. Pectoralis myocutaneous flaps had just appeared on the horizon, but there were no free flaps. Mandibular reconstruction was essentially nonexistent for large defects.

Medical equipment was less sophisticated and technologically driven. There were essentially none of the miniaturized scopes or cameras that have led to the

advances in minimally invasive surgery with less morbidity. The majority of our sinus surgery was done by open procedures and mostly by feel with limited visualization. Sinus procedures are a good example of how technological advances can actually lead to more health-care expense. In the 80s, residents would graduate with 40 or 50 open Caldwell-Luc and ethmoidectomy procedures. Today they frequently graduate with several hundred endoscopic sinus procedures, demonstrating that while we can now perform the procedures less invasively, their application has increased geometrically.

What else? We had only large mainframe computers with complicated operating systems. The first IBM PC computers did not come into vogue until 1981. Medical education and information technology were dramatically different. For example, the video I showed to the Triological Society meeting as recently as 1987, of a subglottic view of a dog's vibrating larynx, had to be presented on an 8-mm movie projector.

When I was an intern, there were no computed tomography or magnetic resonance imaging scans, just tomograms, which were kept in a film library, and you better be a good friend to the librarian or forget about reading the film. Every patient was admitted the day before surgery and usually stayed for at least one or two nights, even after minor procedures.

Smoking was common and still acceptable. Believe it or not, I recall sitting with my fellow residents at the hospital's nursing station, several of us nervously smoking, before Dr. Ward rounds. His rounds were always very stressful because we never knew what theme Dr. Ward was going to choose to harangue us about. Amazingly, even 25 years ago it was often about wastefulness in the system. When Dr. Ward rounded and noticed it, you better put on your helmet. For example if he saw an IV that was unnecessarily still hooked up and running, he would take out his scissors and, in front of the patient, cut the IV tubing and yell at us saying "I made my money but I don't see how you're going to make yours unless you stop wasting resources."

At this point, after dreaming about Dr. Ward rounds, I was starting to stir, break into a cold sweat and awaken from REM sleep, but for some reason I kept thinking about comments I have heard over and over again regarding health-care spending in the United States. For example, 50% of health-care dollars are spent in the last year or 2 of an individual's life,^{16,17} the implication being that we as a nation are inefficiently spending precious resources on the infirm and aged who have not much time or energy left to add to society.

Why do we do that? Hmm, that's a good question, but the answer is complicated, and it made me recall a PBS television show that I saw on the subject of health-care financing and end-of-life decisions. During the taping a hospital ethicist spent a long time trying to convince an elderly renal failure patient that it was a futile waste of time and resources to request heroics, if he should arrest. When he finally asked the patient, "So do you still want to be resuscitated?" the ethicist looked quite disappointed when the answer was, "Why yes, doctor. What's the alternative?" What is the alternative?

Also, it occurred to me that often we as physicians don't know it is going to be the last 2 years of somebody's life until they've succumbed to their disease.

Now, don't get me wrong. Are there significant problems with access to medical care in this country? Have insurance companies arbitrarily developed rules to limit care to subscribers? Should there be means testing before the government pays for everybody's medical care at age 65? Have physicians willingly participated in conflicts of interest with drug companies and device manufacturers? Is real tort reform important? These are the critical, challenging, complicated issues that should be the focus of current thoughtful debate, but unfortunately this will have to wait due to this morning's tight schedule.

Well...today there are much more effective antibiotics, there are antivirals and antirejection drugs; and the future, what will the future hold? If one projects our present understanding of the neurovascular microanatomy, antirejection medications, therapies for malignancies, and understanding of the genome, I can dream of a time in the near future, let's say 25 years, when patients with advanced disease states of the larynx, tongue, and pharynx could have the organs removed, kept viable in vitro by extracorporeal perfusion, repaired or treated by high-dose chemotherapy or radiation without systemic side effects, and then microvascularily reimplanted into the body and selectively reinnervated. Possibly even a new organ could be grown in culture, to replace the diseased one. Imagine what advantages there would be in avoiding the sequela of current in vivo therapies.

Of course, 25 years from now, medical care might consume another 5% of the GDP so that 22% instead of 17% may be required to bring these lifesaving measures into reality. But really, what is the chance of this happening? As Figure 2 shows, the Congressional Budget Office has shown a 70-year projection based on no change in the way health care is presently financed, but I don't believe for a minute that households are going to allocate more than 25% of their budget to medical care. Even more to the point, the Congressional Budget Office believes that future increases in spending could be moderated if costly new medical services were adopted more selectively than they have been in the past. They contend that "more information on the comparative effectiveness of new alternative medical treatments could offer a basis for ensuring that future technologies and existing costly services are used only in cases in which they confer clinical benefits that are superior to those of other, cheaper services," that is, a greater emphasis on evidence-based delivery of health care.¹

In some respects we are being unfairly blamed and are paying the price today and will pay even more tomorrow for having been so successful in increasing longevity and maintaining quality of life.

But one thread, throughout the fabric of time, has stayed the same, from before I was an intern to now, and will be the same for many years into the future—namely, the physician's ability through the application of science, skill, spirituality, hope, friendship, humanitarianism, and

maybe even dreams to positively impact the lives of patients he or she cares for.

The last memory that I'm going to recount for you occurred 20 years ago, when I was referred a poor Latino tree trimmer who had fallen and crushed his larynx and trachea. He also had an expressive aphasia after the accident with some extremity weakness. He was sent to me from a county hospital, and I operated on him a number of times pro bono over several years, trying to get his trach out. When I finally removed his t-tube, I distinctively remember on his last visit, when I taped up his tracheostomy, he looked up at me, with tears of gratitude in his eyes and I heard him speak for the first time. He said in a broken voice, "Thank you Dr. Berke. Thank you." It was at that emotional moment that I fully realized just how lucky we are to be physicians, and what a privileged profession this truly is. I know many of you have had a similar experience and understand that this is the real motivation behind why we have chosen this calling and are assembled here today.

A hundred years from now, when the Triologic is having its 214th annual meeting on the Moon, perhaps the president will be worrying about what to say to you folks and will dream about otolaryngology and will also conjure up a vignette or two on medical economics or how lucky he or she is to be a physician. Thanks again for this great honor.

BIBLIOGRAPHY

1. Orszag P. Presentation on the long-term outlook for health care spending [Congressional Budget Office Web site]. November, 2007. Available at: <http://www.cbo.gov/doc.cfm?index=8758>. Accessed January 18, 2011.
2. DuBosar R. Healthcare spending: Slowest growth since the great depression [Better Health Web site]. January 06, 2011. Available at: <http://getbetterhealth.com/healthcare-spending-slowest-growth-since-the-great-depression/2011.01.06>. Accessed January 18, 2011.
3. Technological change and the growth of health care spending [Congressional Budget Office Web site]. January, 2008. Available at: <http://www.cbo.gov/doc.cfm?index=8947>. Accessed January 18, 2011.
4. The World Health Organization's ranking of the world's health systems [Geographic.org Web site]. June 21, 2000. Available at: <http://www.photius.com/rankings/healthranks.html>. Accessed January 18, 2011.
5. Aleshina N, Redmond G. *How High Is Infant Mortality Rate in Central and Eastern Europe and the CIS?* Report No. 95. Florence, Italy: UNICEF Innocenti Research Centre; November, 2003.
6. Healy B. Behind the baby count [US News and World Report Web site]. September 24, 2006. Available at: http://health.usnews.com/usnews/health/articles/060924/2healy_2.htm. Accessed January 18, 2011.
7. Smoking, obesity slowing U.S. life expectancy gains: Report [St. John Providence Health System Web site]. January 25, 2011. Available at: <http://www.stjohnprovidence.org/HealthInfoLib/swArticle.aspx?6,649205>. Accessed January 25, 2011.
8. Stossel J. Why the U.S. ranks low on WHO's health-care study [Real Clear Politics Web site]. August 22, 2007. Available at: http://www.realclearpolitics.com/articles/2007/08/why_the_us_ranks_low_on_whos_h.html. Accessed January 18, 2011.
9. Tieu T, Tieu C, Gray CL. The battle over health care at America's medical schools [Fox News Web site]. March 12, 2010. Available at: <http://www.foxnews.com/opinion/2010/03/17/dr-cl-gray-universal-health-care-medical-students-progressives-sicko/#>. Accessed January 18, 2011.
10. Preston SH, Ho J. Low life expectancy in the United States: Is the health care system at fault? *University of Pennsylvania Scholarly Commons* [Internet]. July 1, 2009, 09(3). Available at: http://repository.upenn.edu/psc_working_papers/13. Accessed on January 18, 2011.
11. McCaughey B. U.S. cancer care is number one [National Center for Policy Analysis Web site]. October 11, 2007. Available at: <http://www.ncpa.org/pub/ba596>. Accessed January 18, 2011.
12. Coleman M, Quaresma M, Berrino F, et al. Cancer survival in five continents: a worldwide population-based study (CONCORD). *Lancet Oncol* 2008;9:730-756.
13. McCaughey B. Where are the best cancer survival rates? [Seeker Blog Web site]. September 14, 2007. Available at: <http://stevewarden.wordpress.com/2007/09/14/where-are-the-best-cancer-survival-rates/>. Accessed January 18, 2011.
14. Goldring A. US vs. Europe: Life expectancy and cancer survival [Free Market Mojo Web site]. September 27, 2009. Available at: <http://freemarketmojo.com/?p=3312>. Accessed January 18, 2011.
15. Constantian M. Where U.S. health care ranks number one: Isn't 'responsiveness' what medicine is all about? [Docs 4 Patient Care Web site]. January 07, 2010. Available at: [http://docs4patientcare.org/_blog/Resources/post/US_Ranks_Number_1_in_UN\(WHO\)_Most_Important_Measure_The_Wall_St_Journal/](http://docs4patientcare.org/_blog/Resources/post/US_Ranks_Number_1_in_UN(WHO)_Most_Important_Measure_The_Wall_St_Journal/). Accessed January 18, 2011.
16. Matzo M, Witt Sherman D. *Palliative Care Nursing Quality Care to the End of Life*, Third Edition [Internet]. New York: Springer; 2010. Available from: <http://books.google.com/books?id=rTexGiX5bqoC&pg=PA87&lpg=PA87&dq=50%25+of+health+care+expenditure+occurs+in+the+last+2+years+of+a+patients+life&source=bl&ots=cGyHI0Ng07&sig=ukjEJ71hAVAWmDyjPVTA1pvWhIA&hl=en#v=onepage&q&f=false>. Accessed January 18, 2011.
17. Court A. The cost of dying [CBS News Web site]. November 22, 2009. Available at: http://www.cbsnews.com/stories/2009/11/19/60minutes/main/5711689_page4.shtml?tag=contentMain;contentBody. Accessed January 18, 2011.