Looking Ahead

The Cornell Roosevelt Institute Policy Journal

Center for Healthcare Policy

Issue No. 3, Fall 2012

LOOKING AHEAD

The Cornell Roosevelt Institute Policy Journal

Center for Healthcare Policy

Issue No. 3, Fall 2012

Photo Courtesy

Front Cover Photo:
http://www.sfgate.com/politics/article/Obama-signs-health-care-reform-into-law-3194674.php

Photos on Page 29:
http://a0.twimg.com/profile_images/362843901/R_short_logo.jpg

http://4.bp.blogspot.com/-l4lamEZsBfQ/TYNclMUGtWI/AAAAAAAAABE/bO-jU-5cu4Y/s249/cornell_logo.gif

Back Cover Photo:
http://wikihistoria.wikispaces.com/file/view/fdr.jpg/55841592/fdr.jpg

---

TABLE OF CONTENTS

ROOSEVELT INSTITUTE | CAMPUS NETWORK

About the Roosevelt Institute

The Roosevelt Institute at Cornell University is a a student-run think tank that generates, advocates, and lobbies for progressive policy ideas and initiatives in local, university, state, and national government. Members write for our campus policy journals, complete advocacy and education projects in the local community, host research discussions with professors, write policy and political blogs, and organize campus political debates and policy seminars.

The Roosevelt Institute is organized in 7 policy centers:

Center for Economic Policy and Development
Center for Foreign Policy and International Studies
Center for Energy and Environmental Policy
Center for Education Policy and Development
Center for Healthcare Policy
Center for Domestic Policy
Center for Local Government and University Affairs

Interested in joining? Email your inquiry to cornellrooseveltinstitute@gmail.com and check out our website, http://rso.cornell.edu/rooseveltinstitute, for further information.

ROOSEVELT INSTITUTE | CAMPUS NETWORK

Letter from the Policy Director

Dear Readers,

As you know, now is an exciting time for the United States healthcare system. As more and more gears of the Affordable Care Act begin to turn, Americans will witness extraordinary changes to the "iron-triangle" of healthcare. Still, the consequences of these changes on quality of care, cost of care, and *even* access to care largely remain a mystery. Will Medicare pay-for-performance initiatives, public health programs, comparative effectiveness reporting, and the push for information technology actually improve the quality of care? Will preventative healthcare programs and the newly chartered Independent Payment Advisory board actually lower costs? Will the expansion of health insurance actually expand access to care in the face of a severe physician shortage and lower reimbursement rates? Healthcare enthusiasts look forward to following these questions closely in the upcoming years.

The Cornell Roosevelt Institute Center for Healthcare Policy is pleased to present our first ever healthcare-specific Looking Ahead Policy Journal. Our analysts have spent many hours carefully crafting proposals that compliment the goals of the current reform initiative- improved quality, reduced costs, and expanded access. Topics touch on a variety of issues, from measures to combat the American obesity epidemic and tighter regulations on food and medicine, to increasing sanitation in hospitals and restructuring the US tax code. We look forward to sharing our work, and we hope that you enjoy!

Sincerely,

Dylan Cicero
Policy Analysis and Management '14 (HumEc)
Policy Director
Center for Healthcare Policy
Email: dfc58@cornell.edu

ROOSEVELT INSTITUTE | CAMPUS NETWORK

Prevention of Concussions in Youth Football

By Perry Davidoff '14, Major: Government (A&S), Email: psd38@cornell.edu

The Federal Government should push forward legislation that requires athletic trainers to be present at all high school football practices and games. The presence of athletic trainers would reduce the long-term impacts of football-related concussions on player health, school liability, and the sport itself.

Background:

Key Facts:

- 1.3 million high-schoolers play football.
- Post-concussion syndrome is a complex disorder "in which a variable combination of post-concussion symptoms- such as headaches and dizziness- last for weeks and sometimes months after the injury that caused the concussion."[10]
- Second Impact Syndrome is "a condition in which the brain swells rapidly and catastrophically after a person suffers a second concussion before symptoms from an earlier one have subsided."[11]
- Only 42% of high schools nationally employ athletic trainers.

It is estimated that 1.3 million young adults play football in high school. While there are approximately 67,000 diagnosed concussions every year, it is believed that the number should be much higher, as only about 47 percent of high school players who have had concussions report them.[1] Football currently has the highest incidence of concussion out of all other sports at 2.34 out of every 1000 players.[2] The impacts of post-concussion syndrome on the brain are significant. The condition causes a variety of symptoms such as headaches, memory loss, and irritability. While 80% of concussion victims do recover in 7 to 10 days,[3] misdiagnosis can lead to even more severe side effects. Second Impact Syndrome (SIS) is triggered by a second hit to the head before the original concussion has healed. SIS leads to brain swelling and most often, death. According to a study by the University of Pittsburgh, in the United States alone, 20 deaths in the last 10 years have been attributed to Second Impact Syndrome.[4]

Ever since a landmark concussion study by the National Football League in 2007, 41 states have passed legislation related to concussions and youth football. Legislation typically requires youth players to be removed from play if they are suspected to have a concussion, and legislation creates mandatory concussion training sessions for coaches. Four states have similar legislation pending.[5] Six states - Arkansas, Georgia, Mississippi, Montana, Tennessee and West Virginia - do not have a concussion law and have not even begun discussions in their respective legislatures. Continuing concerns may keep parents from letting their children play football at all. The Michigan High School Athletic Association found a 6.9 percent drop in football participation in 2011 -

the first decrease in history - as a result of increased concussion dialogue.[6] Thus, legislative reform is necessary to maintain player safety while upholding the popularity of the game.

Analysis:

Talking Points:

- Athletic trainers diagnose more concussions and can therefore diminish the risks of concussion, including Second Impact Syndrome.
- The cost of the trainer is a stopgap measure that adds cost today, but diminishes cost over time through fewer lawsuits and more player participation.

While productive legislation should eventually include reforms to equipment, adequate technological progress has not been made yet. Until that point, athletic trainers must become a requirement for every high school. According to the Athletic Trainers Association, only 42% of high schools across the country have certified athletic trainers, and only 52 percent of parents report that trainers on payroll were present at football practices.[7] Athletes at schools with athletic trainers are more likely to be diagnosed with a concussion, and as a result, have a much lower chance of suffering from SIS.[8] In an era where high school playing time may lead to college scholarships and a chance for an NFL dream, players will do all they can to stay in the game. In this environment, players are much more likely to withhold information from others, and thus, athletic trainers become the only qualified stopgap measure to diminish concussion related injuries.

There are always budget concerns in public schools, and athletic trainers might certainly exacerbate financial issues. In 2011, the average high school athletic trainer made $42,442.[9] However, football continues to be a big source of revenue for high schools, and lower participation rates could lead to financial losses . Additionally, lawsuits from concussion-related incidents could lead to financial losses; families around the country have received millions of dollars from universities, high schools, and other athletic associations citing negligence. Without proper training on the sidelines, schools and their athletic governing bodies could be at risk for significant financial loss. Athletic trainers will both prevent concussions and diminish legal responsibility at these schools.

Next Steps:

Most states have shown significant progress in concussion prevention However, the federal government must push states, especially those without any concussion law, to require athletic trainers on the sidelines of every practice and every game.

Endnotes:

1) Sentry, Brain. 2012. Concussion Facts - Impact Detectors. http://brainsentry.com/testimonials/ (accessed November 3, 2012).

2) Sports MD. January 2, 2012. Sports Injuries, Medicine and Injury Treatment Videos. Sports MD. http://www.sportsmd.com/articles/id/38.aspx (accessed November 2, 2012).

3) Wedro, Benjamin. August 27, 2012. "Concussion Symptoms, Causes, Treatment - What Is the Treatment for Concussion? http://www.medicinenet.com brain_concussion/page4.htm (accessed November 2, 2012).

4) Brain Trauma Research Center. 2012. "Sports Related Concussions." http://www.neurosurgery.pitt.edu/trauma/concussion.html (accessed November 2, 2012).

5) Education Week. 2012. Concussion Laws by State. http://www.edweek.org/ew/section/infographics/37concussion_map.html (accessed October 31, 2012).

6) Chaney, Jeff. 2012. Football Participation Numbers Decline 6.9 Percent, but Why? http://highschoolsports.mlive.com/news/article/-710759908839524 1927/football-participation-numbers-decline-69-percent-but-why/ (accessed October 30, 2012).

7) De Lench, Brooke. 2012. Athletic Trainers: Every High School Should Have One. http://www.momsteam.com/team-of-experts/athletic-trainer-AT-every-school-should-have-one (accessed November 1, 2012).

8) Science Daily. October 22, 2012. High Schools With Athletic Trainers Have More Diagnosed Concussions, Fewer Overall Injuries. http://www.sciencedaily.com/releases/2012/10/121022080649.htm (accessed November 1, 2012).

9) Science Daily. October 22, 2012. High Schools With Athletic Trainers Have More Diagnosed Concussions, Fewer Overall Injuries. http://www.sciencedaily.com/releases/2012/10/121022080649.htm (accessed November 1, 2012).

10) Mayo Clinic. 2012. Definition: Post-concussion syndrome. http://www.mayoclinic.com/health/post-concussion-syndrome/DS01020 (accessed November 5, 2012).

11) Cifu, David. 2012. Repetitive Head Injury Syndrome. http://emedicine.medscape.com/article/92189-overview (accessed November 3, 2012).

Focusing SNAP Funds on Purchases of Produce Grown Locally

By Kaylin Greene '15, Major: Policy Analysis and Management (HumEc), Email: kag283@cornell.edu

To provide low-income families with a means of accessing healthier produce, and to boost the local economies of farm-based communities, Congress should provide funding that is reserved for the purchase of locally grown fruits, vegetables, and other produce.

Background:

Low-income families and communities in America face the highest rates of obesity; one Colorado study finds that Colorado children living in households that earn less than $25,000 a year had a 25% percent obesity rate while those living in households earning $75,000 or more had an 8 percent obesity rate. This is primarily due to lack of nutritional education and the fact that unhealthy foods are much cheaper to buy than fresh produce.[1] Even though the Supplemental Nutrition Assistance Program (SNAP) provides participants with funds to buy food, a study by the United States Department of Agriculture shows that these people tend to buy foods primarily composed of simple starches and sugars (like cornbread, potatoes and regular soda), over healthier, more nutritious foods (such as raw vegetables, whole grains, and diet soda).[2] Eating habits that start in childhood also heavily influence food choices made as an adult.[3]

Key Facts:

- Some of the main factors for obesity in adulthood are determined by eating habits developed as children.[3]
- Lower-income households are more likely to have higher rates of obesity,1 partially due to lack of financial access to more expensive fresh produce and perpetuated by the lack of healthy eating habits.[2]
- Farmers markets and the demand for locally-grown produce is rising and contributing to the financial success of small, local farmers.[4]
- Buying locally-grown food can be expensive. However, when produce is in season, local foods cost less than produce bought at the store, which can be very affordable for low-income families.[5]

Even though the economy has seen a decline in recent years, locally grown food has generated a significant amount of momentum in groceries nationwide, which also suggest that any related policies that are implemented could receive more positive reception among consumers overall. Purchasing locally grown produce and other foods supports small farmers and economies that are relatively small in terms of where the food is grown and sold. The definition of "local" varies: Wal-Mart considers this to be

anything grown and sold in the same state. Whole Foods considers this to be anything grown within a 200 mile radius or a 7 hour drive of the store. And Seattle's PCC natural Markets considers this to be anything grown from Washington, Oregon and S. British Columbia.

Talking Points:

- A study performed in Southwest Iowa found that a modest increase in fruit and vegetable production on farms could bring an additional $2.67 million in labor income and 45 farm-level jobs to the region.[4]
- Lower-income households' consumption of fruits and vegetables are currently limited to iceberg lettuce, potatoes, canned corn, bananas and frozen orange juice.[5]
- Obesity rates are highest in lower-income households, where financial access to healthier foods is often not an option.[1]

Analysis:

This is an opportunity to create a mutually beneficial relationship between low-income people who are in need of better nutrition and a growing area of the agricultural economy that can truly flourish under government support. While the existing SNAP program already has some restrictions on food purchases,[2] it is clear that these are not enough to fully support a nutritious, balanced diet for participants. Participants have the freedom to choose any foods that fall under SNAP approval, however, since healthier foods are more expensive, foods that tend to be cheaper and less healthy are selected more often. By providing an entirely separate subset of funds that go directly into the purchase of locally grown produce, SNAP participants have access to the benefits of consuming fresh fruits and vegetables.

In order to promote life-long healthy habits, this program would be most effective when directed at low income families with young children who are in the midst of developing eating habits that will last a lifetime.[3] Because poor food choices lead to a prevalence of obesity in children, and because two thirds of children with a BMI in the 95th percentile or higher grow up to be very obese as adults,[6] encouraging families to establish healthier eating habits for their children is crucial. A study on longitudinal tracking of adolescent food choice behaviors recommends that "interventions should begin prior to sixth grade, before behavioral patterns become more difficult to change."[7]

Furthermore, by choosing to focus on locally grown foods, money that the government puts forward to support the SNAP participants will be directly funneled into supporting small, local famers as well as the community that the farmers and the SNAP participants share. While the costs of this will be more expensive for the SNAP program at the beginning, these costs will be offset in the long run by lowered healthcare costs due to lower obesity levels and related health complications as well as economic prosperity of the locally grown foods market. Furthermore, buying locally-grown food when it is in season can be much less expensive than buying food from a corporate

grocery store.[5] Obesity costs America upwards of $147 billion a year, and obese individuals spend 80 percent more money on prescription drugs and 36-43 percent more on overall medical costs per year than healthier individuals. Providing a means for preventative health measures - i.e. healthy eating - can instead shift these medical costs towards the promotion of maintaining basic health and the expansion of the local food economy.[8]

Next Steps:

This policy will be more likely to come to light under a president and congress interested in providing domestic support for small business and low-income families. Since locally grown foods are already trending in an upward, positive direction in supermarket purchases, even people who do not qualify for low-income social welfare should be interested in this policy since it expands the market for locally grown foods.

Endnotes:

1) Dowding, Heather. "Concentrated Animal Feeding Operation (CAFO)." Encyclopedia of Earth. 21 Nov. 2008. Web. 24 Oct. 2012. <http://www.eoearth.org/article/Concentrated_Animal_Feeding_Operation_(CAFO)>.

2) Weaver, Scott. "Cow Country: The Rise of the CAFO in Idaho | As mega-dairies and feedlots make up more of Idaho's dairy industry, the conflicts between people and cattle are increasing | Features | Boise Weekly." Boise Weekly. 1 Sept. 2010. Web. 24 Oct. 2012.<http://www.boiseweekly.com/boise/cow-country-the-rise-of-the-cafo-inidaho/Content?oid=1755457>.

3) Rosenberg, Martha. "The Overuse of Antibiotics in Livestock Feed Is Killing Us | Alternet."Alternet | Alternative News and Information. 25 Jan. 2010. Web. 24 Oct. 2012. <http://www.alternet.org/story/145272/the_overuse_of_antibiotics_in_livestock_feed_iskilling_us>.

4) Mathews, Kenneth. "USDA ERS -Cattle & Beef: Statistics & Information." USDA ERS -Home.Web. 31 Oct. 2012. <http://www.ers.usda.gov/topics/animal-products/cattlebeef/statistics information.aspx>.

5) "PCRM: Physicians Committee for Responsible Medicine: Email - Breaking Medical News: Meat Consumption Increases Risk of Breast Cancer." PCRM: Physicians Committee for Responsible Medicine: PCRM Support. Web. 25 Oct. 2012. <http://pcrm.convio.net/site/MessageViewer?em_id=14581.0&dlv_id=20222>.

6) "U.S. Meat Production." Physicians for Social Responsibility | PSR. 2008. Web. 25 Oct. 2012.<http://www.psr.org/chapters/oregon/safe-food/industrial-meat-system.html>.

7) Williams, Erin. "Cleaning Up CAFO Permit Rules." Pew Environment Group. 27 Aug. 2012. Web. 25 Oct. 2012. <http://www.pewenvironment.org/news-room/otherresources/infographic-cleaning-up-cafo-permit-rules-85899413571>.

8) Hribar, Carrie. "Understanding Concentrated Animal Feeding Operations and Their Impact on Communities." National Association of Local Boards of Health. Web. 25 Oct. 2012. <www.cdc.gov/nceh/ehs/Docs/Understanding_CAFOs_NALBOH.pdf>.

9) "U.S. GAO - Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern." U.S. Government Accountability Office (U.S. GAO). 4 Sept. 2008. Web. 11 Nov. 2012. <http://www.gao.gov/products/GAO-08-944>.

Stricter regulations on CAFOs Will Mitigate Human Health-Related Risks

By Alexandra Gribbin '16, Major: Environmental Exploration (CALS), Email: ang44@cornell.edu

The Federal Government should implement tighter regulation on Concentrated Animal Feeding Operations (CAFOs) to reduce the incidence of cancer and other health risks associated with meat consumption and environmental pollution in the United States.

Background:

Key Facts:

- States with high concentrations of CAFOs experience on average 20 to 30 serious water quality problems per year as a result of manure management problems.[8]
- CAFOs contribute to antibiotic resistance that accounts for 70,000 American deaths per year.[3]
- Every 23-gram increase in daily consumption of processed meat leads to a 23% increase in risk of breast cancer. American women take in about 70.1 grams a day; the recommended intake is 46 grams.[4]

Over the last two decades the dairy industry has experienced a transformation from open pastures to highly mechanized CAFOs. The Environmental Protection Agency (EPA) defines an animal feeding operation (AFO) as an agricultural enterprise where feed is brought to animals held in confinement. A CAFO is an AFO variation that is more like a "farm factory;" over 300 animals are raised in captivity and waste is discharged directly or indirectly into a body of water.[1] CAFOs have revolutionized the economy by producing mass quantities of food at low cost while maximizing land space. Idaho, the fifth-leading producer of dairy products in the nation, has increased its milk production from less than 3 billion pounds in 1991 to 11 billion pounds in 2007 by use of CAFOs.[2]

Despite economic feasibility and customer satisfaction of low priced meat, a majority of Americans are unaware of the rising health risks attributed to the unsanitary conditions of CAFOs. Meat manufacturers embed antibiotics in feed to speed animal growth and preclude disease. Excessive antibiotic intake causes the animals to grow at abnormal rates, often impairing their ability to walk. The nontherapeutic use of antibiotics in CAFOs has facilitated the rise of "superbugs," or drug resistant bacteria. According to investigative health reporter Martha Rosenberg, antibiotic resistant infections lead to 70,000 American deaths annually.[3]

A cheap supply of meat also indirectly affects health by encouraging Americans to consume it in larger quantities. According to the United States Department of Agriculture, the value of the United States beef industry is sharply increasing; it valued at $60 billion in 2002 and escalated to $79 billion in 2011.[4] This is especially alarming because a

higher intake of meat is linked with significantly higher incidence of breast cancer.[5] A recent study of 378 postmenopausal Danish women found that every 23 gram increase in consumption of total meat, red meat, and processed meat led to a 9, 15, and 23 percent increase risk in breast cancer, respectively.[5]

Other important human health considerations are the effect of growth hormones in CAFO produced meats. Recombinant bovine growth hormone (rBGH) is injected into cows to increase milk production.[6] Consuming animal products containing growth hormones increases the risk of antibiotic resistance and may be connected to higher incidence of colon, breast, and prostate cancers.

Moreover, the confinement of animals in cramped spaces in CAFOs generates tons of excess waste. Manure containing excess nitrogen nutrients, antibiotics, and pathogens -including viruses and micro bacteria, can pose risks to human health and water quality.[7]

Analysis:

Talking Points:

- Going forward with the establishment of a CAFO database by the EPA will ensure tighter government regulation of health-related issues.
- Local government-run workshops will educate Americans on CAFO meat production procedures and will encourage Americans to make more informed decisions about meat buying.

It is in the best interest of Americans to impose stringent government regulation on the amount of antibiotics and growth hormones added to CAFO produced-meat. It is also imperative for meat to be labeled as "CAFO produced" and to mention its chemical additives. These regulations will reduce the incidence of cancer, prevent the growth of superbugs, and allow consumers to make informed meat purchases.

It is also essential to closely monitor waste removal processes in CAFOs to prevent runoff into nearby water supplies. States with high CAFO activity encounter on average 20 to 30 serious water quality issues per year due to manure management pitfalls.[8] Meat processors that own the animals must assume full responsibility for manure management. Americans living in rural areas near CAFO facilities have the potential to become ill from waste runoff.

Next Steps:

In 2008, the Government Accountability Office (GAO) reported to Congress that additional information and "a clearly defined strategy to protect … water quality" from the effects of CAFOs is needed from the EPA.[9] The GAO also recognized lack of reliable

data on CAFOs and urged the EPA to create a reliable database. In early 2012, however, the EPA rescinded its proposal to establish a CAFO database under strong opposition arguing that states knew the necessary information. As a result of the EPA's inaction, the GAO remains unaware of the locations of many unregulated CAFOs. In order for legislation to be effective, the government must compile reliable data on CAFOs to determine a clear policy aimed at regulating CAFO runoff into nearby waterways. It is crucial for the EPA and the Federal Government to continue the process of locating CAFOs and obliging farm owners to regulate waste products and antibiotic use for the sake of human health nationwide

Until any legislation goes into effect, the government should initiate workshops to educate Americans about how their meat is produced. It is important for Americans to be aware of where their food comes from and to understand the risks involved when buying products from CAFOs.

Endnotes:

1) Aguilar, Joselyn, and Hector Iturbe, Edward Jackson, and DeEssa Krishan, "The Fattening of America: Analysis of the Link between Obesity and Low Income," *Stanford Medical Youth Science Program*(2010), http://smysp.stanford.edu/documentation/researchProjects/2010/fatteningOfAmerica.pdf (accessed November 8, 2012).

2) United States Department of Agriculture, Food and Nutrition Service, Office of Research of Analysis, "Building a Healthy America: A profile of the Supplemental Nutrition Assistance Program." Last modified 2012. Accessed November 8, 2012. http://www.fns.usda.gov/ORA/menu/Published/SNAP/FILES/Other/BuildingHealthyAmerica.pdf.

3) Nicklas,Theresa A.. "Dietary Studies of Children: The Bogalusa Heart Study Experience," *Journal of the American Dietetic Association*, 95, no. 10 (1995): (1127-1133), http://www.sciencedirect.com/science/article/pii/S0002822395003053 (accessed November 8, 2012).

4) "Ames, Iowa: METRO AREA LOCAL FOOD DEMAND BENEFITS RURAL ECONOMIES ,"*BioCycle*, 51, no. 2 (2010): 15, http://connection.ebscohost.com/c/articles/48438476/ames-iowa-metro-area-local-food-demand-benefits-rural-economies (accessed November 8, 2012).

5) Drewnowski, Adam, and Petra Eichelsdoerfer, "Can Low-Income Americans Afford a Healthy Diet?,"*Nutr Today*, 44, no. 6 (2010): 246-249, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2847733/ (accessed October 27, 2012).

6) Blue, Laura. "Do Obese Kids Become Obese Adults?." *Time*, April 28, 2008. http://www.time.com/time/health/article/0,8599,1735638,00.html (accessed November 8, 2012).

7) S H Kelder, C L Perry, K I Klepp, and L L Lytle, "Longitudinal tracking of adolescent smoking, physical activity, and food choice behaviors.," *Am J Public Health*, 84, no. 7 (1994): (1121-1126), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1614729/?page=5 (accessed November 8, 2012).

8) Reinberg, Steven. ABC News, "Almost 10 Percent of U.S. Medical Costs Tied to Obesity ." Last modified 2012. Accessed November 8, 2012. http://abcnews.go.com/Health/Healthday/story?id=8184975&page=1

Stricter Safety Regulations Needed in the Pharmaceutical Compounding Industry

By Layla Hood '14, Major: Biological Sciences (CALS), Email: lmh229@cornell.edu

The FDA should implement stricter and more coherent regulations on production and distribution of compounding pharmaceutical medications to increase patient safety.

Background:

Key Facts:

- Studies have found that about one third of compounding pharmacists fail to produce satisfactory medications.[6]
- About 40 million prescriptions for compounded medications are written each year for pediatric patients, dialysis patients, and patients with allergies and other special needs.[4]
- Compounded drugs are not FDA-approved.[3]

The recent meningitis outbreak has resulted in the deaths of 24 people and the infection of hundreds more; thousands are still waiting to see if they will also become affected. The Centers for Disease Control and Prevention (CDC) reports that the cause of this infection was a tainted drug synthesized by a New England area compounding pharmacy.[1] Pharmaceutical compounding is the practice of making individualized medications for unique patients. Pediatric patients often require medicine in liquid or flavored forms, requiring them to be compounded. Hospice patients often use compounded pharmaceuticals tailored to specific dosages for their prescribed treatments. Other patients have allergies and other special needs that prevent them from taking traditional medications. The recent outbreak of meningitis has reignited concerns about federal and state regulations concerning pharmaceutical compound production and distribution.

The Pharmacy Accreditation Board reports that around 40 million prescriptions need to be compounded each year.[2] Both state and federal mandates exist to regulate the safety of drugs being made, but according to many health care policy professionals, these regulations are often unclear.[4] The Compliance Policy Guide of May 2002 states that compounding may occur in only small amounts and after receiving valid prescriptions.[7] It also states that compounded medications must be synthesized using components from a list of FDA-approved substances and using commercial scale manufacturing or testing equipment.[7] These compounding regulations clarify the difference between compounding and manufacturing, but place little emphasis on regulation. Several states have pharmaceutical boards dedicated to adherence, but even these efforts are not enough.[5] Additionally, because these drugs are not mass-produced, they do not need to be approved by the FDA.[8]

Studies completed by state pharmaceutical boards have found that a third of the time compounding pharmacists fail to produce satisfactory medicines and frequently under or over-concentrate dosages due to errors in calculation and the manufacturing process.[6] Considering the lax regulations and the many manufacturing errors on the part of pharmacists, compounding medications that are not safe are being distributed to patients for use. It is a necessary for the FDA to research and enact stricter regulations to ensure that products being released to the public are just as safe as FDA-approved medications.

Analysis:

Talking Points:

- Enforcing stricter regulations would make pharmaceutical compounding safer for patients.
- Labeling compounded medications would warn patients of the risks.

Compounding pharmaceuticals are often cheaper to produce than mass-produced drugs, due to relaxed oversight by state pharmaceutical boards and the FDA. According to a recent *Los Angeles Times* article, the compound form of progesterone was 1.67 percent the price of the FDA-approved version of progesterone.[6] Testimony during a hearing in the United States Senate Committee on Health, Education, Labor, and Pensions, reported that compounded drugs could be manufactured at only 2.5 percent the price of FDA-approved drugs.[5] However, the same testimony acknowledged that compounding pharmacists often use cheaper and potentially unsafe products to make higher profits.[5] By enforcing stricter safety regulations on compounding medications, cheaper and safer medications would be made available to patients. While stricter regulations could increase the cost of production, it would be offset by the decrease in medical expenses and lawsuits related to the infections and negative side effects of unregulated compounding drugs.

Next Steps:

In order to address the issue of unsafe production and distribution of compounding pharmaceuticals, the FDA and states must enforce stricter regulation on compounded pharmaceuticals. Until these regulations go into effect, the FDA should mandate proper labeling to warn patients of increased risks of compounded medications. Adopting these changes would increase the safety of compounding pharmaceuticals for many patients.

Endnotes:

1) "CDC Responds to Multistate Fungal Meningitis Outbreak." Centers for Disease Control and Prevention <http://www.cdc.gov/HAI/outbreaks/currentsituation/>

2) Murry, Tom. "Facts about Compounding Pharmacies and Accreditation." Pharmacy Compounding Accreditation Board. <http://www.obrienrx.com/doc_pdf/PCAB%20Fact%20Sheet.pdf>

3) "Pharmacy Compounding Compliance Policy Guide; Availability." Department of Health and Human Services, Food and Drug Administration. June 7, 2002. 67: 110. <http://www.fda.gov/OHRMS/DOCKETS/98fr/060702c.htm>.

4) Riley, Rebecca. "The Regulation of Pharmaceutical Compounding and the Determination of Need: Balancing and Access Autonomy with Patient Safety." LEDA at Harvard Law School. April 2004. <http://www.leda.law.harvard.edu/leda/data/646/Riley.html>.

5) Prepared testimony of Sarah L. Sellers for a hearing before the US Senate Committee on Health, Education, Labor, and Pensions. "Federal and State Role in Pharmacy Compounding and Reconstitution: Exploring the right Mix to Protect Patients." Oct 2003. <http://pharmwatch.org/comp/sellers.shtml>.

6) Gottlieb, Scott. "A heavy cost for cheap drugs." LA Times. Oct 21, 2012. <http://articles.latimes.com/2012/oct/21/opinion/la-oe-gottlieb-steroids-fda-compounding-pharmacy-20121021>.

7) Galston, Steven K.. "Federal and State Role in Pharmacy Compounding and Reconstitution: Exploring the Right Mix to Protect Patients." Statement before the Senate Committee on Health, Education, Labor, and Pensions. October 2003. <http://www.fda.gov/NewsEvents/Testimony/ucm115010.htm>.

Financially Rewarding Hospitals that Improve Hand-Washing Hygiene

By Elaine Jaworski '14, Major: Policy Analysis and Management (HumEc), Email: emj43@cornell.edu

The Federal Government should reward hospitals with higher Medicare payouts if they can prove increased hand-washing compliance.

Background:

Key Facts:

- At least one-third of hospital-acquired infections could be prevented. Provider hand hygiene is the most effective prevention strategy.[1]
- In the United States, 1 in every 136 patients becomes severely ill as a result of acquiring an infection in hospital.[2]
- Hospital-acquired infections incur additional costs of $4.5–$5.7 billion and about 90,000 deaths a year.[2]

Compliance to hand-washing guidelines is below 50 percent among all hospital personnel, and even lower, around 20 percent, among doctors.[6] An estimated 2 million Americans are infected and 90,000 die each year from hospital-acquired infections.[2] The World Health Organization acknowledges hand hygiene as one of the most important steps to providing safe healthcare, with over 129 countries pledging their support for hand hygiene as a means to combating hospital-acquired infections.[4] However, compliance is still too low in the United States, given the simplicity, low costs, and extraordinary benefits of hand-washing. A few hospitals have shown through pilot programs that it is feasible to raise compliance. Methodist Hospital, in Houston, Texas, launched a program in 2006 with two key features. First, alcohol-based hand sanitation stations were installed widely across the hospital, and second, outside employees were hired to observe and record the staff's hand-washing behaviors, while blending in with health personnel. Reports were shared monthly with the staff and compliance increased to 91 percent. Costs were minimal and the hospital was able to reduce central line infections and other hospital-acquired infections. Massachusetts General Hospital initiated a similar program increasing compliance from 47 to 96 percent, with cost savings per year estimated between $4-8 million due to a drastic decrease in MRSA, VRE, and CDAD cases.[8]

Analysis:

In order to increase hand-hygiene across all hospitals these two key features, seen in pilot programs, must be implemented in all hospitals. First, installing alcohol-based hand sanitizers that are easily accessible throughout the hospital. Doctors, who are the

least compliant in hospitals, attribute forgetfulness, inaccessible supplies, inconveniently located sinks, skin irritation, and insufficient time as reasons for non-compliance. [5] Providing liquid dispensers in every patient room, staff room, computer room, etc., eliminates nearly all of these problems. Alcohol-based disinfectant serves as a visual reminder, can be placed throughout the hospital with ease, does not need a sink, soap, or water, does not cause skin irritation, only takes a few seconds to use, and is just as effective as soap and water in reducing the spread of infections. [5] Second, hospitals must have a way of tracking levels of compliance. Successful hospitals have chosen to either hire outside personnel or staff members such as nurses to observe one to two hours a week. It is important for all staff members to understand they are being observed and have a way of viewing their compliance on a monthly basis. This tracking creates an atmosphere where all personnel want to improve their hospital's compliance. Overall costs for this program are minimal, ranging from $12,000-$34,000 a year for the hospital, depending on observation technique. [7]

Talking Points:

- Increasing hand-washing compliance is the most cost effective way in reducing hospital-acquired infections.[1]
- Doctor's hand washing compliance is still below 30% in most hospitals, and 90,000 people a year are dying in the United States due to hospital-acquired infections.[6]

Costs of treating hospital-acquired infections are estimated at $31,000 per patient, meaning that as long as two infections are prevented a year, the hospital will save money. [8] This cost-benefit analysis is for hospitals only and does not include the lives saved and hours spent out of the hospital and in work for patients. These minimal costs should not pose as an implementation problem. Lack of commitment from doctors and nurses, who have no personal financial incentives to wash their hands, may pose a larger implementation problem.[2] Some hospitals, such as Mass General, have provided small rewards in order to motivate behavioral changes. However, dependent on the hospital's culture and responsiveness, these rewards are not always necessary to be successful. computer room, etc., eliminates nearly all of these problems.

Next Steps:

Since October 1, 2012, under the Affordable Care Act (ACA) hospitals receive Medicare payments based on performance. Those with higher performance ratings receive higher payments for performing the same service (although arguably they provide a better service). Ratings are based on patient-satisfaction and procedural measures of effectiveness.[9] In following years, the ACA should weigh more heavily the importance of hand hygiene in performance ratings. Hospitals should be financially rewarded if they install alcohol-based hand rub, observe compliance, and are able to prove that compliance has increased.

Endnotes:

1) Centers for Disease Control and Prevention. " Guideline for hand Hygiene in health care settings." 2002. http://www.cdc.gov/handhygiene.

2) World Health Organization. "Improved Hand Hygiene to Prevent Health Care-Associated Infections." Collaborating Centre for Patient Safety Solutions. May 2007. http://www.ccforpatientsafety.org/common/pdfs/fpdf/presskit/PS-Solution9.pdf.

3) Harris, Scott. "Hand Washing Takes Center Stage." Association of American Medical Colleges. 2012. https://www.aamc.org/newsroom/reporter/archive/70286/feb07_handwashing.html.

4) World Health Organization. "WHO CleanHandsNET-a network of campaigning countries." WHO. 2012. http://www.who.int/gpsc/national_campaigns/en/.

5) Pittet, Didier, "Improving Adherence to Hand Hygiene Practice: A Multidisciplinary Approach" *Emerging Infectious Disease* accessed November 2012, doi: 0.3201/eid0702.700234

6) Erasmus, Vicki, Thea Daha, Hans Brug, Jan Richadrus, Myra Behrendt, Margreet Vos, Ed van Breek, "Systematic Review of Studies on Compliance with Hand Hygiene Guidelines in Hospital Care," *Infection Control and Hospital Epidemiology* 31, No. 3, accessed November 2012, doi: 10.1086/650451

7) Govednik, John and Maryanne McGuckin. "Hand Hygiene Measurement and Education." Patient Safety and Quality HealthCare. 2011. http://www.psqh.com/mayjune-2011/835-and-hygiene-measurement-and-education.html.

8) Tarselli, Judy. "Comprehensive Program to change hand hygiene culture Improves Adherence to Disinfection Guidelines, Leading to Lower Infection Rates and Costs." Agency for Healthcare Research and Quality. 2012. http://www.innovations.ahrq.gov/content.aspx?id=2909.

9) Mukherjee, Sy. "Hospital Focus on Patient Satisfaction as Obamacare Measure Takes Effect." ThinkProgress. October 2012. http://thinkprogress.org/health/2012/10/16/1019151/hospitals-patient-satisfaction-obamacare/.

Taking a Stand: Further Regulations on Smokeless Tobacco Marketing

By Ryan Kelleher '14, Major: Applied Economics and Management (CALS), Email: rpk57@cornell.edu

The Federal Government should implement harsher marketing regulations on chewing tobacco to reduce the prominence of chewing tobacco among teenagers.

Background:

Key Facts:

- In 2008 alone, $547.9 million was spent by smokeless tobacco companies on advertising and marketing products.[1]
- United States Tobacco expenditures in magazines increased from $3.6 million to $9.4 million from 1997-2001.

According to the Campaign for Tobacco-Free Kids, total marketing expenditures of the top five smokeless tobacco companies have increased by 276% from 1998 to 2008.[1] Despite efforts like the 1998 Smokeless Tobacco Master Settlement Agreement that placed restrictions on advertising to youth, smokeless tobacco companies continue to advertise in products that provide open access to youth, such as the magazines *Rolling Stone and Sports Illustrated,* and smokeless tobacco companies strategically target the younger demographic with less "harsh" fruit-flavored starter packs. Further legislative initiatives, like the 2010 Family Smoking Prevention and Tobacco Control Act, which bans tobacco sponsorships at sports and entertainment events, within 1,000 feet of schools and playgrounds and in vending machines, and requires age verification for every sale,[2] are well intentioned, but do not do nearly enough. Each year, approximately 824,000 young people ages 11 to 19 in the United States experiment with smokeless tobacco, and 304,000 of them become regular users.[3]

Analysis:

Further legislation should ban direct mailings and place restrictions on Internet marketing. After providing their personal information in exchange for tobacco-related coupons or samples, tobacco companies put kids on their mailing lists and appeal to them in ways they can relate to, such as teenage rebellion. Internet marketing restrictions are necessary because kids spend the majority of their free time interacting on the Internet. According to *The New York Times,* kids ages 8 to 18 spend more than seven and a half hours per day on the internet with either mobile devices or computers, packing about 11 hours of media content into that time span.[4]

If fewer kids are exposed to smokeless tobacco advertisements, fewer kids will start using. Over time, the restrictions will lower the health-care costs associated with conditions caused by smokeless tobacco, such as oral cancers, heart disease, and stroke. One case of Oral Cancer alone costs an average of $79,151 per year.[5] Indeed, New York City Mayor Michael Bloomberg has already dedicated significant time to anti-tobacco campaigns, and has attributed the increase in life expectancy in New York City to these efforts[3]

Next Steps:

Moving forward, the United States government needs to take this issue more seriously if there any improvement will be made. Instituting harsher marketing regulations is going to cause fierce opposition from tobacco companies. In response, the government could offer a reasonable subsidy for the tobacco companies that comply with the stricter regulations. Ideally, the lower health care costs devoted to conditions caused by smokeless tobacco use should greatly outweigh the subsidies. At the same time, tobacco companies can still make some of their lost profit with an incentive to follow the rules. Alternatively, tobacco companies could be fined if they choose not to comply. The fines could be determined based on severity of the violations, as well as by an estimated timeframe that they occurred. Ultimately, a conscious effort will need to be made to monitor these companies to ensure they are not finding loopholes, but doing so will reduce health care costs and allow for a healthier society.

Talking Points:

- Lower smokeless tobacco use would reduce healthcare costs
- Downward trends in smoking rates have pushed cigarette companies into the smokeless tobacco market, allowing for a surge in smokeless tobacco usage due to popular brand name recognition.
- Smokeless tobacco companies are finding ways around the regulations already in place, so further solutions are necessary.

Endnotes:

1) Boonn, Ann. "Smokeless Tobacco in the United States." Accessed October 23, 2012. http://www.tobaccofreekids.org/research/factsheets/pdf/0231.pdf

2) American Lung Association, "What FDA Regulation of Tobacco Products Really Means." Accessed October 24, 2012. http://www.lung.org/stop-smoking/tobacco-control-advocacy/federal/fda

3) Adams, Griffin. policymic, "Mayor Michael Bloomberg's New York City Anti-Smoking Campaign Produces Results, Yet Needs Improvement." Accessed October 24, 2012. http://www.policymic.com/articles/4467/mayor-michael-bloomberg-s-new-york-city-anti-smoking-campaign-produces-results-yet-needs-improvement.

4) Lewin, Tamar. The New York Times, "If Your Kids Are Awake, The'yre Probably Online." Last modified 2010. Accessed November 7, 2012. http://www.nytimes.com/2010/01/20/education/20wired.html?_r=0.

5) Roush, Matt. CBS Detroit, "New Research Finds Oral Cancer May Be Most Costly To Treat." Last modified 2012. Accessed November 7, 2012. http://detroit.cbslocal.com/2012/04/26/new-research-finds-oral-cancer-may-be-most-costly-to-treat/.

Combating American Obesity Through Incentivizing Smaller Portions

By Max Segal '14, Major: Biometry & Statistics (CALS), Email: mcs269@cornell.edu

State governments should offer monetary incentives to restaurants for reducing average portion sizes by up to 25 percent.

Background:

Key Facts:

- Currently, Americans are 40% more likely to consume meals from restaurants 3 or more times a week than they were in the late 1980s.[3]
- In the European Union, which boasts far lower obesity rates than the United States, portion sizes are, on average, 25% smaller than in the United States.[3]

While some write the American obesity epidemic off as an individual issue of personal responsibility and, likewise, self-consequence, it costs the United States upwards of $147 billion each year in health care costs.[1] This puts an increasingly heavy burden on taxpayers to help fund the Medicare and Medicaid systems. While there is a lot of attention and industry dedicated to the exercise side of weight control, it would prove beneficial to address the correlation between portion size increases and waistline increases as well. The Center for Disease Control and Prevention reports that the average restaurant meal today is roughly four times larger than it was in the 1950s.[2] Over this same time span, the average American's weight has increased by 26 pounds.

Already, Mayor Michael Bloomberg of New York City has passed a controversial 'Soda Ban' that bans vendors from selling caloric beverages in cups larger than 16 ounces. However, an iron fist approach to portion control—which is not popular amongst food and beverage vendors—may be too harsh to gain national support. Instead, I propose a policy of incentivizing restaurants to promote portion control through monetary subsidies.

Analysis:

Americans are eating away from their homes at continually increasing rates. The 1990s saw a 26 percent bump in the percentage of each food dollar spent in restaurants as compared to the 1970s.[3] Therefore, by attacking portion sizes at restaurants, state governments could significantly affect obesity regardless of eating habits within the home. But is it feasible to expect restaurants to hop on board with a subsidy initiative?

It's entirely plausible. Since most dine-in restaurants already fill entire plates with food, they would only need to scale back standard 12-inch plates by 2 inches to achieve a 25 percent reduction in portion size.[4] Furthermore, fast casual and fast food establishments, which offer large portion size increases for minimal price increases, could easily be compensated for lost revenues due to the elimination of super-size sales. Take, for example, McDonalds, which offers a value meal size increase from medium to large for only $0.25.[5]

Talking Points:

- Although subsidizing smaller portion sizes could initially cost taxpayers, the long-term effects of reducing obesity should result in a lowered cost to maintain the American healthcare system.
- Since Americans have shown no signs of voluntarily decreasing the size of the portions they choose to consume, subsidizing smaller portion sizes can be an effective way to reduce caloric intake without forcing restrictions on consumers.

Although the money states generate for subsidies would come out of taxpayers' pockets, a decrease in portion sizes would reduce both the direct economic costs of obesity on the healthcare system as well as the indirect costs of an overweight work force. These indirect costs include the $130 billion lost annually to absenteeism, decreased productivity, and short-term disability caused by obesity.[6]

Next Steps:

This policy would be enacted most appropriately at the state level. Perhaps states with higher obesity rates, like Texas and Mississippi, would benefit from higher subsidies while less drastic incentives would be sufficient in states like Colorado and New York, which have lower obesity rates. Therefore, in order for this initiative to come into practice, state legislatures would need to carry out three major steps. First, they would need to vote on the potential tax increases needed for the funding of restaurant subsidies. Next, a plan for how subsidies are to be distributed needs to be laid out. Compensation could be paid out to restaurants according to sales lost or the scale of portion size decreases, or a flat subsidy could be paid per month. Finally, restaurants must willingly sign onto the initiative in order for effective results to be realized.

Endnotes:

1) Finkelstein, EA, Trogdon, JG, Cohen, JW, and Dietz, W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. Health Affairs 2009; 28(5): w822-w831.

2) http://aht.seriouseats.com/archives/2012/05/infographic-the-new-abnormal-todays-portion-sizes-compared-to-1950s.html.

3) Ledikwe, JH, Ello-Martin, JA, and Rolls, BJ. Symposium: Modifying the Food Environment: Energy Density, Food Costs, and Portion Size. J. Nutrition 2005; vol. 135 no. 4, 905-909.

4) "Portion Sizes Growing with American Waistlines." MSN.com. Associated Press, 6 Dec. 2006. Web.

5) http://www.mcdonalds.com.pk/products/view/menu-pricelist.

6) Hoffman, Beth. "What The Obesity Epidemic Costs Us [Infographic]." Forbes. Forbes Magazine, 16 Aug. 2012. Web. <http://www.forbes.com/sites/bethhoffman/2012/08/16/what-the-obesity-epidemic-costs-us-infographic/>.

Eliminating Tax Exemptions on Employer-Sponsored Health Insurance

By Emily Shearer '14, Majors: Biology and Government (A&S), Email: ejs288@cornell.edu

Elimination of the employer-provided health insurance tax exemption would reduce income inequality, slow the growth of medical expenditures, and generate billions of dollars more in revenue annually - revenue that can be used to finance the Patient Protection and Affordable Care Act (PPACA).

Background:

Key Facts:

- Tax exemptions on employer-sponsored health insurance serve as a huge subsidy to those who can most easily afford it.
- The health insurance tax loophole creates market distortions that contribute to the growth of health care spending.
- PPACA expands employer-provided insurance, magnifying the consequences of the health benefits tax exemption.

The development of employer-sponsored health insurance is an accident of United States history. In 1942, the Federal Government issued national wartime wage controls that necessitated companies to compete for scarce workers on the basis of pay. Employers were allowed, however, to offer health benefits to their workers as exceptions to these controls. The result was the explosion of employer-sponsored health coverage. In 1954, the phenomenon was cemented by the Internal Revenue Service's change to the federal tax code, which declared that contributions employers made to their employees' health insurance plans could not be included in those workers' taxable incomes. Today, over 158 million Americans benefit from this loophole by receiving tax-free health benefits through their employers. In 2011, employer-provided insurance was the leading source of coverage, representing 58.3 percent of all health plans.[1]

Analysis:

Social tax expenditures such as the health insurance benefit distort market operations. These policies do not operate through laissez-faire economics, but rather through government subsidization of the private sector.[3] Tax-exemption gives employers and employees a financial incentive to provide part of the worker's compensation in the form of health benefits.[1] The incentive is greatest for high-income employees, as they are in the highest tax brackets and therefore stand to capture the most benefit from increased coverage. The result is an insurance subsidy that is upwardly

redistributive: 30 percent of benefits of employer-provided coverage are conveyed to the top 15 percent of the income distribution.[3] The net worth of the subsidies are also skewed to the wealthy: households with an annual income of $200,000-500,000 received $4,971 in average benefits, whereas households with an annual income of $10,000-20,000 only received $1,535 on average.[3]

Talking Points:

- Reports from the CBO show that including health benefits in taxable income could result in $246 billion of additional revenue annually.
- Savings realized from elimination of the health insurance tax expenditure could be used to finance subsidized coverage for low-income families.

Moreover, the insurance tax subsidy has contributed to growing health care costs. Because employees who receive health insurance benefits from their employers do not face the full cost of the services they use, they have incentive to accept procedures and treatments offered no matter how small the benefit. Consequently, the United States spends a greater percentage of its GDP on health with each passing year, as medical expenditures have consistently outpaced GDP in terms of annual growth.[1] Finally, tax-exemption on employer provided insurance is outrageously costly to the Federal Government. Reports from the Congressional Budget Office (CBO) show that including health benefits in taxable income could translate to $246 billion in additional tax revenue annually.[2]

Next Steps:

The recent administration's health care reform should be taken one step further. PPACA expands the health benefits tax exemption by mandating large employers to provide health insurance to their employees. While other aspects of PPACA, such as the new tax credit available to small employers offering health coverage, seek to address the inequality of the tax-exemption, they do not address the root of the problem. Adding legislation that eliminates the tax-exempt status of employer-provided health insurance should be considered as a way to build upon and improve existing health care reform. This policy would save the United States government billions of dollars in lost revenue, eliminate unfair subsidies to high-income citizens, and remove market distortions that result in an artificially inflated demand for expensive medical services. Moreover, savings realized from this policy could be used to finance federally subsidized health coverage for low-income families as outlined by the PPACA. The United States government should act to encourage competition among health plans on the basis of broad access to services, high quality of care, and competitive premium costs. This will not happen until employees, especially those in the top income brackets, are faced with higher out-of-pocket costs for expensive health plans.

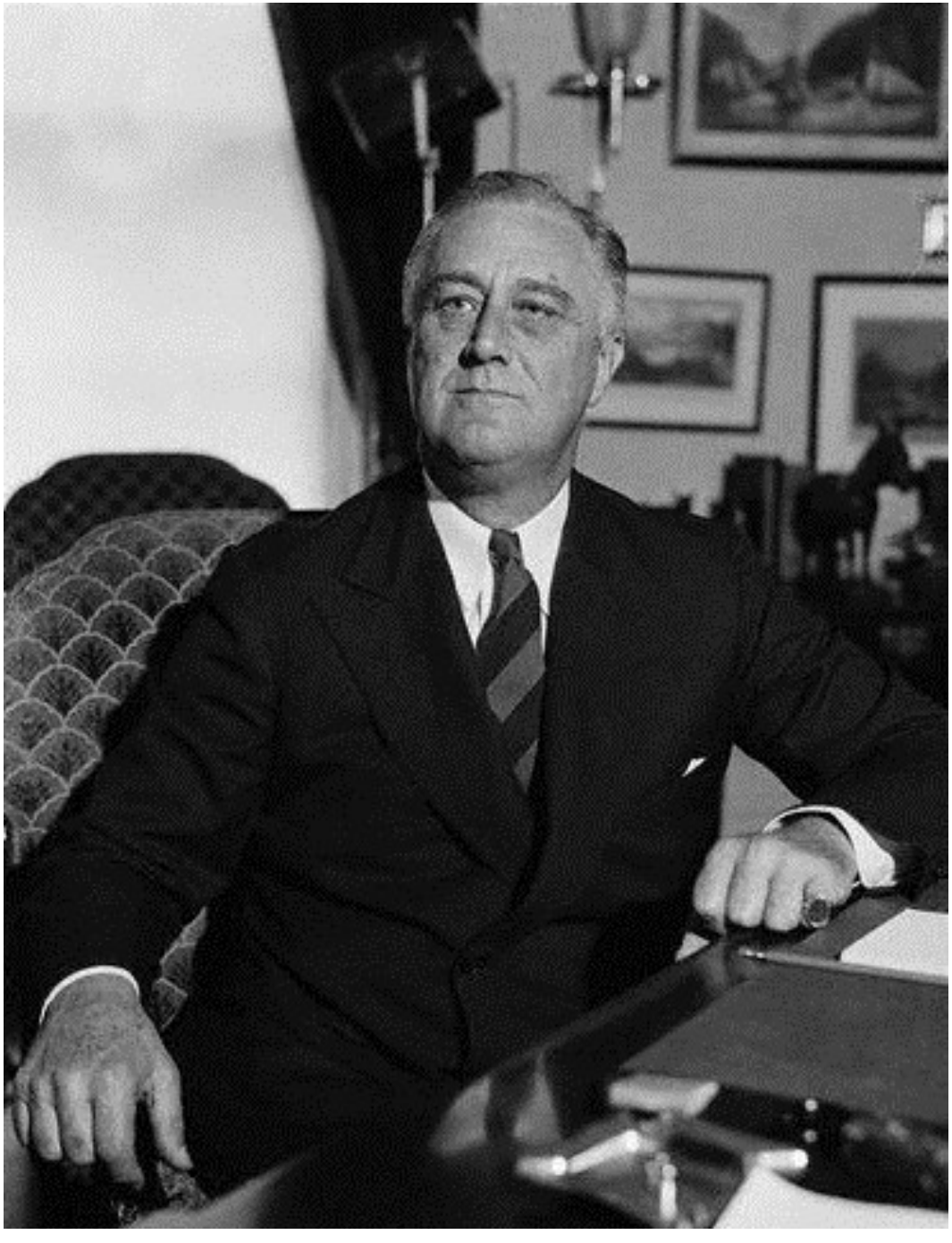
Endnotes:

1) Nicholson, Sean. "US Health Care System." Lecture from Cornell University, Ithaca, NY, August 24-October 30, 2011.

2) Chen, Rachel. "Employer-Sponsored Health Insurance." *Yale Journal of Law and Medicine* 4 (2009). Accessed September 19, 2012, http://www.yalemedlaw.com/2009/11/employer-sponsored-health-insurance/

3) Mettler, Susan. *The Submerged State.* Chicago: The University of Chicago Press, 2011.

R



ROOSEVELT INSTITUTE | CAMPUS NETWORK