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Good morning. I am pleased to have the opportunity to discuss the benefits of creating a culture of health in the workplace. In my remarks, I will discuss our experiences at Pitney Bowes and draw some broad lessons for all employers managing, what I believe to be one of the most important domestic issues facing not only the United States, but the entire developed world.

The title of this forum is “Creating a Culture of Health to Improve Your Bottom Line.” Let me begin this discussion on what I call the value side of the health equation, as contrasted with the cost side of health care. If I gave you a summary of Pitney Bowes 17-year journey to develop a culture of health it would be accurate to say: By actively investing in health and in helping those with health problems manage their medical conditions we have been successful in keeping health cost increases well below market averages.

But, that synopsis only captures half of our story. The sustainable value that can be derived from investments in health, are productive, engaged employees capable of delivering economic value to customers and shareholders. Talent is the engine of our global economy. If we can help optimize an employee’s health, then we can help maximize their performance. Thus the focus is not solely on improving our bottom line. It

is instead on improving the presence and performance of those responsible for our bottom line.

Issues related to health costs, and who is going to pay for those costs, dominate discussions of health care reform among public officials and many corporate executives as well. I can understand why it is easy to get focused on these costs. The numbers associated with health care in America are big and growing. Escalating health expenses are impacting our overall economy and impacting our performance and global competitiveness.

The United States spends far more in absolute dollars (over \$2 trillion), percentage of GDP (15.2% and rising), and per capita costs (\$5,711) on health care than any other country in the world. Some estimate that U.S. employer's health care costs rose an average of 6.1% last year.

Uncontrollable and unpredictable increases in health care costs are a major factor in reducing the number of employees hired, in causing employers to discontinue both retiree and active medical coverage, and driving employers to move operations from high labor cost areas to lower labor cost areas onshore and offshore. Think about the recent negotiations between auto manufacturers and organized labor. Health care was one of the key issues that all of those discussions revolved around.

Thus, the cost side of the health care equation does impact the bottom line of our economy and of businesses across America. But, if we don't look past cost to examine the fundamental issues driving those costs, then we are looking at an incomplete picture. The questions that we must all ask are

“what are we getting for what we spend”, and “why are we spending more and more?”

The answer is simple. American health costs are skyrocketing because American health is deteriorating. You see this everyday in the work, research and study that you do here at the University. Here are some examples that I found:

- There is an epidemic of preventable chronic diseases like diabetes, cardio-vascular diseases, and hypertension. They comprise the highest percentage of our health care costs, and according to the Centers for Disease Control and Prevention, they account for 7 of every 10 deaths in the United States and affect the quality of life for over 100 million Americans. According to the World Health Organization, we have a higher incidence of obese adults over 15 years of age at 19.7% for males and 21.2% for females than most other developed countries. Cardiovascular diseases, the leading killer in the U.S., are clearly preventable, and all of these preventable chronic diseases interact with one another in very harmful ways.
- There is also a crisis with respect to infectious diseases. Besides the obvious broad problem of HIV/AIDS, we are also seeing a resurgence of tuberculosis and other infectious diseases once believed to be under control. The Global Health Council also points out that we are also seeing an increased incidence of deaths in hospitals from antibiotic resistant bacteria. The MRSA virus has been in the news, because it is a strain of antibiotic resistant bacteria that is occurring more frequently outside of hospitals in places such as schools. The New England Journal of Medicine pointed out in 2000 that we are also

seeing more infectious diseases from more uncommon sources than ever before. Public health officials also tell us that we are at more risk than ever of a major flu pandemic.

- Other environmentally-induced conditions like emphysema and other chronic obstructive pulmonary diseases continue to grow.

One of my recent blog postings – at [mikecritelli.com](http://mikecritelli.com) – talked about how many of our societal laws and decisions make our citizens less healthy. The more I have studied the issue of obesity, for example, the more convinced I am that one of the highest leverage points in attacking the problem is getting agricultural food subsidies changed. We tend to blame individuals for their eating habits, particularly obese poor people. What we fail to take into account is the extent to which their eating habits are dictated by the relative costs of different foods, particularly the costs of unhealthy vs. healthy foods. Both the availability and cost of foods is heavily influenced by long-standing agricultural subsidies baked into federal laws and U.S. Department of Agricultural regulations.

At a Connecticut health care forum, Congresswoman Rosa DeLauro and other speakers commented on the influence of agricultural subsidies on producing more sugar and grain-based foods. Fruits and vegetables are considered “specialty foods” which are not given subsidies and are therefore more expensive. Much of the unhealthy food our children eat during required school attendance is driven by department of Agriculture policies that increase the use of grains and sugars in lunchtime meals.

When you add the impact of cutbacks in school physical education programs, it becomes apparent that some of the factors impacting the decline in American health are multi-layered and complex.

As our country's health declines, the costs of the resultant acute and chronic illnesses are increasing. At Pitney Bowes we concluded, that if we were really going to address the cost issue in a sustainable manner, we had to focus on the cost drivers by supporting an individual and family's ability to be as healthy as possible. Statistical analyses by a wide range of experts say that between 40-70% of health care costs are behaviorally based, which means that by investing in wellness and preventive care, we can actually help maintain and improve health, while reducing health costs.

That is what frustrates me about the one-sided nature of the public health care discussion today. If we are focused on the costs, and not the issues driving the costs, then we will miss the opportunity to make a meaningful difference. Discussing health care without discussing the root causes of deteriorating health is incomplete. It is comparable to confronting a widespread failure of a mass-market product like brakes on an automobile, by focusing on the cost and availability of repair, instead of focusing on why the brakes failed in the first place.

This revelation – that it was about health, and not health care – is what started our journey for a culture of health at Pitney Bowes in 1990. That year, I was asked to take on the company's human resources management in addition to my responsibilities as general counsel. When I entered the department our company's health care costs had been climbing for five

years. We had a large staff of administrators that helped manage plans and track expenses. But when I asked about the outcomes from our growing expenditures in health care, no one could answer my questions. We were spending more, but not paying attention to our employees health. It was then that we decided that our focus had to be on optimizing the health of those covered by our plans, and it changed our investment priorities, our plan design, and our overall approach to health.

Our core strategy is to promote behaviors that maximize health. Our culture of health combines: providing individuals with the tools, information, and access to affordable health care that they need for prevention and wellness; optimal management of illness and chronic conditions; and, benefit plans and an environment that support and encourage healthy living. We believe that proper nutrition, appropriate levels of exercise and fitness, healthy lifestyles and early detection, intervention and appropriate treatment of conditions, all promote health. We have tried to create an environment that reinforces these behaviors in multiple ways.

What has this culture which focuses on health yielded for us? From 1992 through the end of last year, we have had a virtuous combination of high employee satisfaction and well below normal health care cost increases. In fact, for many years during the 1990's and in recent years, our health costs -- among our populations in our facilities -- were flat from year to year, and significantly below other companies that we benchmark with. We have shared the savings with our employees in the form of lowered contributions and investments in our culture of health.

Before I discuss the specifics of what we did, let me tell you a little about our demographics. I am starting with demographics because we have used a data driven approach to develop health plans to address the specific needs of our population. I believe that it is important for a company of any size to understand who their employees and other health plan participants are and the medical services available where they live and work, in order to design health plans and an environment that will be most effective in optimizing health. Keep in mind that we analyze data about the incidence of illness or conditions within our population in general, and not individual medical information.

During the course of our development of a culture of health our business expanded into new markets, our skills requirements changed, the nature of work changed, and the demographics of our employees changed. We have evolved from primarily a U.S. based equipment manufacturer, to a \$6 billion multi-national provider of equipment, software and solutions to manage mail and documents.

That means that we now have a wider variety of work categories. We have always had a large direct sales and service population, call center workers, and employees involved in manufacturing and assembly. We now have more knowledge workers, employees who work in large processing centers, and a group of employees who deliver services on-site for customers.

Technology and the ease of access to information are freeing work from a time or place dependency. As a result, a larger portion of these employees do not work in company-owned or operated facilities, but instead work

remotely, spend large amounts of their time traveling to and from customer sites, or actually work on customer sites. Over 45% of our U.S. employees work solely on customer sites, and more than 26% are mobile workers who work in sales and customer service jobs that effectively make their car the primary workplace. Since 1990 our workforce, like the American population, has aged significantly, with 41 being the average age of the active benefit eligible employee.

The net result of all of these changes from a health benefits stand point, is that our 26,000-employee U.S. population is really two different populations of roughly equal size. Population 1 resembles the demographics of a large employer, that is, all employees either work on, or report to, sites we control, and many of those sites have sufficient scale that we can support free on-site clinics, cafeterias, and fitness centers. The companies that we have acquired tend to fall into Population 1, but they have a more traditional approach to health care.

Population 2 resembles the demographics of a collection of small businesses. Employees work in small concentrations on hundreds of customer sites as part of our facilities management business, or in mail processing centers (PSI). For this population, we do not have sufficient scale to provide the range of on-site services that our larger concentrations of employees enjoy such as nutritionally-conscious cafeterias. Moreover, the second population is primarily lower-wage workers with a higher concentration of employees who come to us less healthy, less educated about their health and how to use the system efficiently, and with less convenient access to health care.

In general, our workforce mirrors the U.S. population in that we see more complex, chronic illnesses, and a greater variety of conditions than 17 years ago. While this discussion of what we have done will focus on Population 1, we are exploring ways to adapt and deliver the best of our successful practices to Population 2, and to our growing group of mobile and remote workers within Population 1. Use of the web and Internet technologies, partnerships with local/regional health care facilities, and utilization of mobile health services are just some of the ways that we are looking to deliver health information and services to our entire workforce.

Our seasonal emphasis on fighting flu is a great example of ways that we are seeking to serve our entire covered U.S. workforce, and a great example of our approach to developing a culture of health. Approximately 1 month ago every employee received a “Flu Fighter” newsletter at home. We believe that it is important to equip employees with the information that they need to manage their own health.

We specifically target a steady stream of direct mail about health and benefit issues to their home address, because we have found it to be an effective way to reach employees and their loved ones. It also has the benefit of raising awareness of health issues within the household. Employees’ loved ones can be important influences on their health choices and lifestyles and vice versa. If the employee is healthy, but their loved ones are ill, while they may be present physically, they tend to be less productive and less focused at work. By equipping the employee to support the health of those that they care about, we are also supporting their ability to stay fully engaged, while they are at work.

The newsletter featured: information about why controlling flu is important, tips to stay healthy during flu season, guidelines on who is at high risk for getting the flu, and the difference between seasonal flu and pandemic flu. The newsletter also included information about 35,000 off-site locations where employees can get free flu shots, and about 30 on-site locations hosting free flu shot clinics. We also provided phone and Internet registration to find the flu shot location closest to you, and to receive the flu shot coupon for the off-site locations. As I discussed earlier, we believe that prevention is key, and immunizations and screenings are an important part of prevention, as I will discuss. We also feel very strongly that convenient access, to affordable care removes the barriers to preventive care.

This example illustrates that education, prevention, and access are the core of our culture of health. It also demonstrates the need to provide flexibility both in how you communicate, and in the options that you give employees for responding to calls to action and for accessing services.

Here are some specifics about our approach to a culture of health:

We have invested heavily in improving health through illness and injury prevention.

- In our large facility cafeterias, we not only serve appropriate portions of nutritious food and beverages, but our pricing, marketing and merchandising practices drive employees to eat the healthy food.
- We have fitness centers in several of our facilities and subsidize exercise programs and outside fitness center memberships. We also

- give benefit premium discounts for employees that participate in fitness programs like the 10,000 steps-a-day walking program.
- We designed a program called Health Care University (HCU) to incent healthy lifestyles through reduced benefit costs.
    - HCU features a curriculum of health education initiatives and healthy lifestyle programs in everything from stress reduction to disease management, each with a designated number of credits for successful completion that reduce out-of-pocket costs for benefit coverage. The “Flu Fighter” program that I described earlier is offered through Health Care U.
      - Another example -- non-smokers receive credits for maintaining a healthy lifestyle,
      - Those completing a wellness assessment and completing several recommended behavioral changes – such as reducing their BMI, exercising several times a week and drinking more water receive credits as well.
    - We expanded Health Care U to dependents through eHealth portals.

We have enhanced access to and marketing and educational outreach for, affordable care

In addition to making health-promoting plans available to employees, we have made access to health care far easier.

- We have a network of seven on-site medical centers in our major population facilities across the country
  - In-house medical function with two physicians and an array of professional providers including physician assistants, nurse practitioners, and nurses.
  - We handle an average of 35,000 patient visits annually in our clinic network.
- These clinics are free of charge for employees and are open every workday to accommodate the demand within a particular facility.
- We can generally give them a full course of therapy for medications at no charge to treat their acute illness
- We make valuable preventive screenings free or as low-cost as possible and do as much marketing outreach as possible. Aggressive outreach is particularly important because many adults are simply not aware of many disease risk factors.
- We make immunizations free or as low-cost as possible.
- We also have a pharmacy managed by Caremark, our pharmacy benefit manager, adjacent to our World Headquarters, available to anyone we cover under our health plans.

Please don't underestimate the value of immunizations and health care screenings in the culture of health. Recently, the Partnership for Prevention, an organization that is trying to promote prevention and wellness as key health care strategies, issued a report entitled A National Profile on Use, Disparities, and Health Benefits. The value of immunizations, screenings and preventive care is clearly demonstrated by the Report. It noted huge

disparities among races, ethnic groups, and income levels for preventive actions, like adult immunization and colo-rectal screenings.

This is a great opportunity for employers to make a difference. Even if businesses cannot go as far as we do, in terms of providing on-site screening or immunizations, they can look at ways to partner with local health providers or inform your employees about ways to access these services within the community. Employers can also play an important role in directing their employees to information about prevention and enabling them to become more aware of the need for screenings and immunizations.

- We also provide space inside our clinics for specialists who have many employees as patients, and enable them to see many patients in a more focused and shorter period of time than they would in their offices.
- These clinics have benefited us as well as the employees for a variety of reasons:
  - Employees have access to clinical care for minor illnesses and injuries without having to leave the office, without having to schedule an appointment, and without the long waiting times.
  - In fact, employees who have non-contagious conditions will come to work to use the clinic, rather than making a discretionary decision to stay home for the day to access their private care physician. Our savings are enough to cover the cost of the on-site medical care facilities and staff.
  - If their condition is more serious, we refer them to their primary care physicians or help them develop a relationship with a physician. We work closely with their primary care physicians in

the community to make sure we provide complementary service, not a competitive one.

Our experience with the clinics reinforced our belief in the benefit of continuity of care, and the management of health information to optimize health and disease management. This led us to our involvement of Dossia, of which I am Chairman of the Board. Dossia is a consortium of large employers including Pitney Bowes and Intel, funding the development of a personal, portable electronic health record.

Health providers need to have a more unified understanding of the patient's health and history. We believe that a comprehensive understanding of an individual's health treatments and trends enhances the quality of care, enhances the operating efficiency of health care providers, and, most importantly, empowers individuals to assume greater control over their health. We are excited about the possibilities to enhance health that Dossia can bring.

#### Data driven approach

The initiatives that I have described to you thus far helped move our employee population toward better health and keep our costs flat for a decade. When we saw the unanticipated big jumps in health costs in 2000, however, we knew we needed a more robust understanding of what was driving the change. Our next phase of innovation in the delivery of health, was data-driven and linked to trends within our population.

We did an assessment of the most prevalent conditions within our workforce, the behaviors that supported prevention or management of these conditions, and their cost implications. It led us to ask, what was the tipping point, between having the condition, and having it escalate in terms of seriousness and treatment costs?

### Predictive modeling

This last question was particularly intriguing because as we analyzed the data, we saw a pattern where employees incurred minimal to no costs for health, and then within 12 months were incurring costs in excess of \$10,000. We also realized, that beyond the cost impact, these rapid progressions in spending patterns signaled diminished productivity. The productivity implications were critical during this period because we were at the beginning of a major business transformation for growth.

I believe there is a spectrum of health and productivity that ranges from productive engaged employees, to “presenteeism” – during which employees are physically present, but in the early stages when a condition, or its precursor, impacts stamina, concentration and focus. The shift from presenteeism to absenteeism is marked by more rapid progression in the severity of the condition and increasing periods of limited attendance. We knew the cost and productivity implications of employee absence. What we needed to be able to predict were the conditions under which an employee was most likely to move rapidly from productive to merely present. Our plan was to use this information to design programs that would prevent or delay this negative spiral.

We turned to predictive modeling, but not in the traditional sense. Based on our preliminary data analysis we understood the outcomes that we needed to be on the lookout for – chronic diseases such as asthma, diabetes and cardiovascular related. We used a sophisticated software program that started with the outcomes, and then predicted the behaviors that moved individuals from normal to high cost within a 12-month period.

We found a strong association between chronic condition progression and low possession rates of medication, lack of preventive screening, and use of care management programs. For example, if an individual diagnosed with diabetes has filled less than 9 prescriptions for diabetes drugs in the preceding year, then in the following year, their cost of care will probably significantly increase. Another marker was the absence of health care spending in the previous year, indicating that no routine checkups or screenings were performed. Traditionally an employee with a chronic disease is deemed a risk. Our findings revealed that the risk is not in the disease, but in not actively managing its treatment and progression. Or, it is the person who has several risk factors for a condition, and is not screening for any early warning signs.

### Relationship Between Compliance and Costs

This analysis also really helped us understand the relationship between compliance and costs, and in particular the impact on pharmaceutical regimens. The recurring theme that our programs are built around is that it is more effective to maintain health, than to attempt to restore it. This plays itself out rather graphically in what I can the “bell curve” or 80-20 rule of health costs in the workplace. The thought is that at the bottom of the curve

are healthy people, as you move up the curve there are minor ailments, and in many instances chronic conditions in the earliest stages. Further still, the severity of the ailment, or the number of ailments increases. While only 20% of any employee population is distributed at the height of the curve at any given time, those employees generate 80% of the costs.

The traditional way many businesses respond to this cost distribution is cost shifting. Most employers will shift cost management resources to the top of the curve. This minimizes the company outlay while increasing the costs for employees. We believe that this approach is shortsighted for several reasons.

First, cost-shifting does not address the fundamental condition that causes the employee at the top of the curve to need more services in the first place. What makes the employee delay treatment and forego compliance thereby worsening their condition? We found that the biggest driver was cost. Thus, if you increase the costs for this employee, you only serve to exacerbate their non-compliance, accelerate their deterioration, and ultimately drive up their total cost of care, which includes inpatient/outpatient services, pharmacy, disability and absenteeism.

Second, it perpetuates this same cycle of declining health and productivity for more employees at the bottom of the curve by erecting potential cost barriers in the early stages of disease management. In other words, cost-shifting increases the probability that more employees will progress towards the top of the curve as escalating costs influence their decisions to get the

screening, regular check-ups and pharmaceutical therapies that would prevent their condition from worsening.

It brings us full circle to our goal of taking actions to maximize health. Our approach has been to manage the top of the cost curve and invest in the lower part of the curve. That's why in 2002 our modeling led us to remove the barriers to screening and managing chronic diseases by taking on more of the cost, so that the employee would pay less. That included expanding Tier 1 coverage for generic prescriptions and all brand name prescriptions for targeted conditions such as asthma, diabetes and hypertension. The average cost for a 30 day supply of any of the designated pharmaceuticals is 50-80% lower than it was prior to initiation of this program. We also lowered or eliminated costs for preventive services, and we provided first dollar coverage for routine services. (no deductibles)

We are excited about the results. For diabetes treatment, for example, those who were using longer acting insulins, previously found them all more expensive because they are all brand names. By adding all brand names to Tier 1 we immediately brought cost relief to those who needed it most. Regular monitoring of blood sugar levels is also critical in effective diabetes management. The least expensive methods involve prick tools, which can be uncomfortable over long-term usage. There is a machine that sits on top of the skin, which is a higher cost and its test strips are significantly more expensive (about \$50 per 30 day supply). Thus, we also dropped the price of supplies.

Since dropping the cost on all diabetes medications and supplies, we have seen purchase/use of meds double; use of emergency rooms dramatically decrease; and our disability costs cut by 50%. Relative to asthma treatment hospital admissions are down by 20%, and our overall costs down by 20%.

Overall, we have seen improved adherence to pharmaceutical therapies, and better management of the conditions as reflected in the types of medications that employees are purchasing which are more in the “controller” category rather than the “rescue” category associated with emergencies.

For behavioral health conditions, we provide eight free consultations through our employee assistance program to give employees incentives to work with us to find the appropriate provider rather than having them automatically look for the most expensive and fastest treatment plan. This is particularly important for substance abuse treatment, where the most expensive program is not always the most effective. We believe that using “gatekeeping” programs like this is most effective when it is made financially more attractive, not when plan providers eliminate choices for patients. We have also reduced behavioral health costs over the last several years as well.

### Plan Designs Drive Behavior Changes

The overriding lesson from our dialogue today is that plan designs drive behavioral changes. We get the behaviors our plans incent and we see less of the behaviors our plans penalize. Raising costs for medical services or for pharmaceuticals cannot be done across the board. There are good and bad

spending decisions at every stage of a person's life. We need to make sure that our plan design drives decisions consistent with our plan objectives.

Our health plans and initiatives are designed with certain objectives in mind:

- To make sure healthy people stay healthy;
- To get those who are at risk of chronic diseases to undertake programs that will prevent the chronic diseases from taking hold;
- To get early and appropriate diagnoses and treatment of illnesses and injuries;
- To maximize adherence to treatment requirements, especially for chronic diseases to prevent those conditions from getting more serious;
- To drive employees toward highest quality providers based on results achieved following clinical best practices and to reward those providers; and
- To use rigorous data-driven Six Sigma analyses in the design and implementation of our plans, particularly in recognizing that plan designs can drive healthy and cost-effective behaviors.
- We make informed, data-driven choices about what we will or will not pay for, and how much we will pay.
- We look at multiple factors when we invest in health improvement, and try to create a culture of health among our employees, not just the return in terms of lower medical costs. We consider the benefits of reduced absenteeism and “presenteeism” and reduced disability and workers compensation costs.

LESSONS TO BE DRAWN FROM OUR EXPERIENCE

I would draw the following lessons from our experience:

- Employees need to know how to engage in healthy behaviors, and to be in an environment which encourages healthy behaviors in a healthy environment
- The end goals of a culture of health should be the maximization of the health, quality of life and productivity. We should not be looking as much at what we spend for health care, but what we get relative to that spending.
- Investing the most resources in wellness, prevention, and early diagnosis and treatment of illnesses and injuries is the best way to achieve these twin goals.
- It is not enough to have health care designs that reimburse the right behaviors, such as prevention and wellness. The plans must have aggressive and tailored education and marketing outreach, and strong financial incentives for healthy behaviors. We also have to recognize that our plan designs can have a profound impact on whether our covered populations adhere to the treatment plans that address their medical conditions.
- Americans need convenient access to the right providers, the right technologies and processes for health monitoring and improvement, and the right information. Convenient access includes 7x24 access to the right providers and reasonable waiting times for care.
- Plan designs and health care system structures should allow for investments that pay back over a multi-year period and that recognize

the behavioral responses to health care plan designs. For example, multi-year adherence to treatment plans is a far more productive goal than reduce the current year's cost of prescription drugs for the plan sponsors.

- A comprehensive personal, portable, private, patient-controlled electronic health record is an essential tool for a world-class health care system, particularly in getting individuals to take better control over their health and their lives and we should invest in quality management processes and tools across the entire system.
- Employer-based health plans have a unique and valuable role to play in any system because they combine more payback opportunities than any other system.

## CONCLUSION

We believe in the value and the power of a culture of health. The journey to develop and maintain a culture of health is a marathon, not a sprint. It starts with a focus on optimizing health, and the willingness to make investments, that will have returns over time. I have appreciated the opportunity to share our experience with you today. I would now be happy to engage in a discussion and take your questions.