



**ORTHOWORLD POSITION PAPER ON
HEALTHCARE REFORM**

Prepared by ORTHOWORLD Inc.

Published August 5, 2009

ORTHOWORLD

ORTHOWORLD POSITION PAPER ON HEALTHCARE REFORM

As the healthcare reform initiative moves through the halls of Washington, we will undoubtedly be debating what treatments do and do not work and what options should be made available to the American people. When we enter these heated discussions, it is imperative that the facts be examined that allow evaluation of medical procedures and their effectiveness in returning the health and productivity of the citizenry. Orthopaedic care has clearly demonstrated its efficacy. Without question. It has changed tens of millions of lives for the better, forever.

Orthopaedic problems and interventions affect us all at one time or another in our lives. The National Center for Health Statistics estimates that nearly 108 million American adults reported bone and joint medical conditions in 2005.(1) That's nearly half of all Americans over the age of 18. Musculoskeletal disorders and conditions are the leading cause of disability in the U.S. and the most frequently cited reasons for limitations in daily activities of life, with 15 million Americans aged 18+ limited by arthritis, back or neck problems, fractures, connective tissue conditions, etc. More Americans report musculoskeletal conditions than either circulatory (heart disease, stroke, etc.) and respiratory (emphysema, asthma, hay fever, bronchitis, etc.) problems and musculoskeletal conditions remain the greatest cause of lost work days and medical bed days in the U.S.(*ibid*)

In 2004, an estimated \$849 billion was spent in health care costs and lost wages for Americans with a musculoskeletal diagnosis. That's nearly eight percent of our national gross domestic product."(*ibid*) Furthermore, days lost from work neared 438 million, costing workers \$339 billion in aggregate earnings.(*ibid*)

Among the most prevalent musculoskeletal problems are arthritis and back pain.

Arthritis afflicts 47 million Americans and by 2030, nearly 67 million Americans (or about 25 percent of the adult population) could suffer with arthritis. The most common form of arthritis, osteoarthritis, afflicts 27 million Americans(2) and is the leading diagnosis underlying the need for joint replacement procedures.(3)

Joint replacement has been shown to be one of the most highly effective procedures in the history of medicine. Of hip and knee devices implanted ten years ago, more than 90 percent remain in place and functional. Few appliances devised by humankind can offer such a longevity claim. Furthermore, study after study supports the cost/benefit of joint replacement. For instance, two studies found that the cost of surgical intervention for knee arthritis averaged \$35,000, while costs for non-intervention neared \$104,000. A similar dynamic surrounded hip replacement with intervention costing \$40,750 vs. \$223,094 for non-intervention, largely due to reduced custodial care.(4,5) In 2007, some 804,000 primary total hip (THA) and total knee (TKA) replacement procedures were performed in the U.S.(3) Combined, these two procedures provided the "system" with lifetime savings of more than \$80 billion.

A study in Canada determined that "THA and TKA result in significant gains in quality-adjusted life expectancy, and can be considered cost-effective when compared to other elective surgical procedures."(6) Researchers in Spain arrived at similar conclusions, stating that "the costs of both knee and hip replacement compare favorably with other medical or surgical procedures."(7)

According to *Burden of Musculoskeletal Diseases in the United States*, "Joint replacement procedures are proven to be one of the most successful procedures available today. In the vast majority of cases, the procedure significantly improves quality of life and the patient's ability to continue work, activities of daily living, and recreational activities."

ORTHOWORLD

While many believe joint replacement to be an elderly “problem,” it is not. Innovations developed by the orthopaedic community have made joint replacement more accessible to a younger patient group and more and more younger patients are benefiting from joint replacement. For example, in 1997, 26 percent of primary total hip and knee procedures were performed on patients between 45 and 64 years of age. By 2007, these younger patients accounted for 40 percent of all primary total hip and knee replacement patients.(4) These patients are the lifeblood of our future, the workers of tomorrow whose very health and activity will fuel growth in our economy. We need them to be active and productive members of society.

Estimated direct medical costs for arthritis and joint pain patients in 2004 exceeded \$281 billion. Some \$22 billion was attributed to the indirect cost of lost earnings for those aged 18 to 64.(1)

These younger workers are also the primary age group afflicted by low back pain. In 2004, for instance, some 74 percent of health care visits for low back pain came from those under the age of 65. These visits were often accompanied by either a reduced ability to work or a complete inability to work. In fact, back pain is the most often cited issue in work or walking limitations, with some 32 percent of sufferers being limited in the amount or type of work they can do.(*ibid*)

All told, low back pain is the most frequently cited musculoskeletal condition, with nearly 62 million adults in the U.S. reporting having it. One in two Americans experience back pain at least once a year.(*ibid*) Estimated direct medical costs for all spine related conditions reached \$194 billion for the years 2002-2004, with annual indirect costs of \$14 billion in lost wages. Just \$29 billion of these costs related to the cost of primary and revision spinal fusions and inpatient discectomy. Most of the cost derived from nonsurgical therapies.(*ibid*)

Although some back procedures remain controversial, the science of spine surgery is young compared to joint replacement. However, tremendous strides have been made by the scientific, surgical and technology communities. In fact, a recent study found lumbar spine surgery outcomes and cost-to-benefit ratios to be better than or equal to other types of medical implant surgeries (e.g. joint replacement and coronary artery bypass graft surgery).(8)

Over the past generation, manufacturers and surgeons have brought invaluable orthopaedic technologies and treatments to the American public. We have designed and developed stainless steel and titanium plates that repair fractures that would otherwise debilitate patients and leave them bed-ridden as is the case in many third world countries today. As a result of technological advancement, these fractures go on to heal in 95 percent of cases.

Moving into the future, our country will face a potential crisis. In 1960, we had 4.5 workers for every retiree. By 2040, that number will drop to 2.2 workers per retiree.(9) Today, some 140 million Americans under the age of 65 work.(10) An additional six million elderly Americans are working and more and more are working full-time.(11) These 146 million Americans will experience more than two million broken bones each year. More than 80 percent of them will suffer with back pain and they will incur nearly nine million soft tissue disorders and sprains and strains in a typical year. And, due simply to wear and tear of their aging joints (and old sports injuries), they will develop painful arthritis. In turn, they will need fracture repair and joint replacements, spinal disc replacement and other orthopaedic interventions to return them to an active and productive life. Denying or even diminishing this most basic and essential care would not only do perhaps irreparable harm to them, but also to the nation, by depriving it of its economic, social and spiritual engine.

The above document is purposely not copyrighted to allow any and all persons to use all or portions of it in whatever manner they see fit.

ORTHOWORLD

References

1. *The Burden of Musculoskeletal Diseases in the United States*, 2008.
2. National Center for Chronic Disease Prevention and Health Promotion, www.cdc.gov/ARTHRITIS/data_statistics/arthritis_related_statistics.htm
3. Agency for Healthcare Research and Quality, Department of Health and Human Services, hcupnet.ahrq.gov
4. Gottlob CA *et al.* The Long-Term Cost-Effectiveness of Total Knee Arthroplasty for Osteoarthritis. AAOS Scientific Paper #114, Atlanta GA, February 23, 1996. (From www.onepatient.us - Figures adjusted to 2007 dollars, and represent the comparative cost of surgical vs. non-surgical treatment over the life of an average 70-year-old patient with end-stage osteoarthritis.)
5. Chang RW *et al.* A Cost-effective Analysis of Total Hip Arthroplasty for Osteoarthritis of the Hip. *JAMA*, 1996; 11: 858-865. (From www.onepatient.us - Figures adjusted to 2007 dollars, and represent the comparative cost of surgical vs. non-surgical treatment over the life of an average 60-year-old patient with end-stage osteoarthritis.)
6. Suarez-Almazor *et al.* Gains in Quality-Adjusted Life-Years (QALYs) in patients undergoing hip or knee replacement. *Int Soc Technol Assess Health Care Meet*, 1999; 15:57.
7. Espigares, *et al.* The 134th Annual Meeting & Exposition of APHA, 2006.
8. Polly *et al.* SF-36 Physical Component Scale (PCS) benefit/cost ratio of lumbar fusion: comparison to other surgical intervention. 2005.
9. Health Care Financing Administration
10. Bureau of Labor Statistics. Employment status of the civilian noninstitutional population by age, sex, and race, 2008.
11. Population Reference Bureau. Full-Time Work Among Elderly Increases. 2006.