Drivers of Health Care Costs

A Physicians Foundation White Paper - Second of a Three-Part Series

For many years and in countless articles, physicians have been the scapegoat for rising health care costs in the United States. In fact, they have been blamed by many critics for the United States leading the world in health care expenditures.

In the January/February 2013 issue of Missouri Medicine, we saw a close examination of the data that indicates that this blame is misplaced – that delving into key components in health care spending reveals something else. While there is general disagreement among the so-called experts as to the degree of impact of each component, almost everyone seems to agree that new technology – not physicians – is number one on the list of contributors to rising health care costs.

In this issue of Missouri Medicine, the Physicians Foundation examined data on the leading key components and found that chronic disease conditions, life style – including obesity and addictions, administrative expenses, hospitals, pharmaceuticals, mandated insurance benefits, aging, end-of-life care, defensive medicine and health disparities have all had anywhere from a moderate to significant impact on rising overall health care costs.

In the final section, entitled "Interesting Statistics about U.S. Health Care System", we examine why infant mortality rates can be a poor indicator of the success or failure of a health care system. The same applies for life expectancy statistics. Issues such as medical innovation need also to be considered in the general discussion of a health care system's success or failure.

Following a settlement of a class action lawsuit brought by physicians against the managed care industry, The Physicians Foundation (PF) was created in late 2003. It is a nonprofit 501(c)(3) organization that seeks to advance the work of practicing physicians and help facilitate the delivery of quality health care to all Americans. It pursues its mission through a variety of activities, including grant-making, white papers, research, and policy impact studies. The PF focuses on the following core areas: health system reform, physician leadership programs, workforce needs and pilot projects. As the health care system in America continues to evolve, The Physicians Foundation is steadfast in its determination to foster the physician/ patient relationship and assist physicians in sustaining their practices during these challenging and turbulent times.

To this end, The PF commissioned comprehensive national physician surveys in 2008, 2010 and 2012 which revealed a deep sense of frustration, stress and anxiety. Navigating an increasingly hostile practice environment was causing widespread dissatisfaction and low morale. In the wake of burgeoning insurance and regulatory red tape, little or no negotiating power with insurers, increasing office operating costs with low margins, declining reimbursements and the ever present threat of a malpractice action--physicians were having serious problems in sustaining their medical practices.

And then along came The Affordable Care Act (ACA), passed by Congress on March 23, 2010. With its myriad of provisions affecting physician practices--not to mention its length and sheer comprehensiveness--physician angst only multiplied. And it doesn't appear that the recent action of the U.S. Supreme Court on June 28, 2012, has lessened that anguish.

Among the publications appearing on The PF website (www.physiciansfoundation.org) are several "Roadmaps" examining the provisions of the ACA and how they will impact physician practices. One of the goals of The Physicians Foundation is to bring these issues to the attention of the public, business, state legislators, members of Congress and policy-makers so they can better understand how these practice impediments are adversely affecting physicians in their efforts to deliver the best possible care to all Americans. The PF intends to continue its mission to remain in the forefront of those activities and projects to help physicians to better navigate through all of the practice uncertainties ahead.

Timothy B. Norbeck is the Chief Executive Officer of The Physicians Foundation and has over 45 years of experience in the health care field.
Contact: www.physiciansfoundation.org
Part one of a three-part series. Reprinted with permission from The Physicians Foundation.

Technology

According to a report from the Robert Wood Johnson Foundation (RWJF), its authors agree that technological change is the most important driver of health care spending increases over time. A technical review panel convened to advise CMS on future health care costs trends concluded that about half of real health expenditure growth is attributable to medical technology, "where new options for diagnosis and treatment often replace older technologies when none existed before." The RWJF goes on to say that advancing technology may have a particularly large impact on spending in the United States because of "few requirements that effectiveness be demonstrated before technologies are used broadly and concern that their application tends to go beyond those patients likely to benefit the most from them."[28]

In late September 2012, an article in the *Journal of the American Medical Association (JAMA)* indicated that total knee replacement surgeries have soared 161.5% among Medicare participants in the past 20 years, and will continue to grow as the USA's 77 million baby-boomers age. In 2010, people aged 65 and older underwent 243,802 operations to replace damaged knees or to "revise" previous replacements – up from 93,230 in 1991. At about $15,000 each, the total knee replacement tab for patients at every age is now about $9 billion.[29]

By comparison, and according to the Kaiser Family Foundation, Medicare spending for 2011 was estimated at $550 billion. The good news as pointed out by *USA Today* is that such procedures have eased the pain and improves quality of life especially for a rapidly aging population. The bad news is that it "can be viewed as another stress on government, individuals and businesses struggling with current growth in health care costs."[30]

Just another example of new technology is robotic surgery which is now performed in more than 36% of hospitals across the USA, according to PWC's Health Record Institute. According to an August 19, 2010 article in the *New England Journal of Medicine*, the cost of robotic surgery was estimated to be $2.5 billion and growing.[31]

Defining new technology as encompassing the use of any new procedure, drugs or devices, the Congressional Budget Office estimated in 2008 that technology so defined, accounts for anywhere between 38% to more than 65% of new health care spending.

Administrative Expenses

Princeton medical writer and economist, Uwe Reinhardt, suggests that the U.S. health care administrative overhead load is huge by international standards. "The McKinsey Global Institute estimated that excess spending on health administration and insurance accounted for as much as 21% of the estimated total excess spending ($477 billion in 2003). Brought forward, that 21% of excess spending on administration would amount to about $120 billion in 2006 and about $150 billion in 2008."[32]

The McKinsey team estimated that about 85% of this excess administrative overhead can be attributed to the highly complex private health insurance system in the United States. "Product design, underwriting and marketing account for about two-thirds of that total. The remaining 15% was attributed to public payers that are not saddled with the high cost of product design, medical underwriting and marketing, and that therefore spend a far smaller fraction of their total spending on administration."[33]

The Institute of Medicine and the Centers for Medicare and Medicaid (CMS) estimate that administrative costs in the U.S. health care system consume an estimated $361 billion annually, 14% of all health cost expenditures in the nation. Administrative costs are defined as "including spending by public and private health insurers other than actual payments to providers and costs incurred by other system participants, including providers, employees, and consumers, in dealing with insurers."

In the Robert Wood Johnson Foundation (RWJF) report entitled*: High and Rising Health Care Costs,* "Administrative costs were noted as a key reason why spending in the United States exceeds that of other advanced countries."[34]

According to a National Academy of Social Insurance report for the RWJF, overall administrative costs for physicians are in the range of 25-30% of practice revenues. One study cited in the report found costs related to claims and utilization management amounting to 10% of practice revenues. Still another study, which estimated insurance-related costs in most cost centers and included an estimate of physicians' time spent on insurance matters, estimated costs for a primary care office of 15% of revenues.

A U.S. Congress Office of Technology Assessment report on administrative costs in health care, cited an (American Medical Association) AMA 1988 socio-economic survey which indicated that, way back then, the value of physicians' time spent on insurance issues were: $17.4 billion on non-physician salaries, $ 6.64 billion in physician time spent on administration, and $19.54 billion in other administrative costs, for a total of $43.58 billion in 1991.

Of course, the number of physicians has greatly expanded since 1991 along with increased administrative time spent on more regulation, not to mention a plethora of new ones included in the Patient Protection and Affordable Care Act – therefore rendering the $43.58 billion number far lower than today.

Pharmaceutical Costs

According to the 2010 Kaiser study, while spending on prescription drugs ($259.1 million) accounts for only 10% of total health care expenditures, its rapid growth has received considerable attention (a 114% increase since 2000, compared to 88% for both hospital and physician/clinical services combined). However, the 2010 average annual spending growth from 2009 was lower for prescription drugs (1.2%) than for hospitals (4.9%) or physician /clinical services (2.5%). A large part of these rising costs is reflected in the trend away from chemical agents to biological agents which are significantly more expensive to manufacture and to administer.

Mandated Insurance Benefits

According to the Council for Affordable Health Insurance report (CAHI): Health Insurance Mandates in the States 2011, a health insurance "mandate" is a command from a governing body, such as a state legislature, to the insurance industry or health plans to include coverage for (or less frequently, offer coverage for) a particular health care provider, benefit and/or patient population. Some examples are:

- Providers such as chiropractors, podiatrists, social workers and message therapists;
- Benefits such as mammograms, well-child care, drug and alcohol abuse treatment;
- Populations such as non-custodial children and grandchildren.

The total mandate count in 2011 is 2,262, up from 2,156 in 2010. "Today the majority of states have more than 40 mandates each – some have more than 60 - and the accumulated impact of those dozens of increases has made health insurance unaffordable for many Americans." Rhode Island and Virginia (70) have the most mandated benefits with Maryland (67), Minnesota (65) and Connecticut (63) close behind. Idaho (13) has the least mandated benefits, followed by Alabama (19), Michigan (23), Hawaii (24) and Utah (26).

(Note: Mandates in Signatory Society States of The Physicians Foundation are: AK(37), CA (56), CO (58), CT (63), FL (49), GA (45), HI (24), LA (51), NC (55), NE (47), NH (46), NJ (47), NY (61), SC (30), TN (41), TX (62), VA (70), VT (46), and WA (58).)[35]

Strangely enough, the report does not give overall cost estimates of the mandates. But it does say, unequivocally, that "one of the biggest cost drivers in our health care system is the steady proliferation of federal and state-based coverage mandates." According to the CAHI research and annual analysis, "mandated benefits currently increase the cost of basic health insurance from slightly less than 10% to more than 50%." The CAHI concludes that "government interference in the health care system is steadily increasing. So too is the cost of (health) insurance."

Lifestyle

Some 47% - 50% of Americans account for zero percent of all health care spending. A positive lifestyle had much to do with it.

Chronic diseases are the most common and costly of all health problems, but they are also the most preventable. According to the CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), our common, health-damaging but modifiable behaviors – tobacco use, insufficient physical activity, poor eating habits, and excessive alcohol use–are responsible for much of the illness, disability, and premature death related to chronic disease.[36]

- More than 43 million (about one in five) U.S. adults smoke.
- One in five U.S. high school students are current smokers.
- More than one-third of all U.S. adults fail to meet minimum recommendations for aerobic physical activity based on the 2008 Physical Activity Guidelines for Americans. As reported in *The Week* (August 17, 2012), a global study found that the U.S. ranked among the most physically lazy countries in the world, with 40% of Americans engaging in little or no physical activity. Greece was found to be the most active country in the Western world with just 15% inactive.[37]
- Only one in three U.S. high school students participated in daily physical education classes.
- More than 60% of U.S. children and adolescents eat more than the recommended daily amounts of saturated fat.

- Only 24% of U.S. adults and 20% of U.S. high school students eat five or more servings of fruits and vegetables per day.

Obviously, one important way of encouraging prevention is to begin with obesity. A recent article in the *JAMA* pointed out that in 2010, more than 35% of adults and 16% of children aged 2-19 years were obese.[38]

A recent *Wall Street Journal* article tracks the overall U.S. obesity rate as being 17% in 1997, 22% in 2002 and 28% in 2011. The maximum load or weight limit for a CAT scanner to accommodate an obese patient was 300 pounds in 1997, 490 in 2002 and 660 in 2011. New machines are being built for heavier patients, and hospitals and physicians will have to pay as much as 40% more for the larger sized scanner which now costs up to $650,000.[39]

Chronic Diseases/Conditions

According to federal data, the costliest 1% of patients account for 20% of all health care spending in the United States. Ten percent of the population consumes 63% of the total health care dollars in the country. People with three or more chronic disease conditions generally fall into that 1% category, according to Linda Dunbar, RN, PhD, and Vice President of Care Management at Johns Hopkins Healthcare.[40]

Experts seem to all agree that more than 75% of health care costs are due to chronic conditions such as heart disease, cancer, stroke, diabetes and arthritis. The National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) says that chronic diseases cause seven in ten deaths each year in the U.S. and that, alarmingly, the percentage of U.S. children and adolescents with a chronic health condition have increased from 1.8% in the 1960s to more than 7% in 2004. Although chronic diseases are obviously more common among older adults, (nearly one in two adults live with at least one chronic illness, and 88% of Americans over 65 have at least one chronic health condition) they affect people of all ages and are now recognized as a "leading health concern of the nation."

The NCCPDHP points out the following about key chronic diseases:

- Heart disease and stroke are the first and third leading causes of death, accounting for more than 30% of all U.S. deaths each year.
- Cancer, the second leading cause of death, claims more than half a million lives each year.
- Diabetes is the leading cause of kidney failure, non-traumatic lower extremity amputations, and new cases of blindness each year among U.S. adults aged 20-74 years.
- Arthritis, the most common cause of disability, limits activity for 19 million U.S. adults.
- Obesity has become a major health concern for people of all ages. One in every three adults and nearly one in every five young people aged 6-19 are obese.[41]

Chronic diseases are the most common and costly of all health problems, but they are also the most preventable. Four common, health-damaging, but modifiable behaviors – tobacco use, insufficient physical activity, poor eating habits, and excessive alcohol use – are responsible for much of the illness, disability, and premature death related to chronic diseases.

All experts agree that in order to get a better handle on rising health care costs, we must better address the costliest 10% which account for 63% of health care costs.

Aging

The previously mentioned authors of the RWJF Report entitled *"High and Rising Health Care Costs: Demystifying U.S. Health Care Spending"* agree that technological change is the most important driver of health spending increases over time and that population aging plays only a minor role.[42] Just as in examining all of the components driving health care costs, there is room for much disagreement.

For example, the Social Security Advisory Board's report entitled *"The Unsustainable Cost of Health Care"*, reiterates that "most research on the effect of aging on health care spending has found relatively small effects." Mentioned in the report is a CBO review of the literature which estimates that from 1940 to 1990 population aging only accounted for about 2% of overall health care cost growth.[43]

But the aging of the baby boomer generation over the next 25 years or so is expected to play a large role in the increased cost of Medicare and Medicaid. "According to the CBO's most recent Long-Term Budget Outlook projections, aging will account for about 44% of growth in the two programs through 2035."

End of Life Care

WNET, N.Y. Channel 13 reported recently on the Health Care Financing Administration (HCFA) end-of-life spending trends study of 1993 which looked at data for 1975, 1980, 1985, and 1988. Although somewhat dated, it remains one of the most extensive studies in the field.

"Their findings belie perceptions that a larger percentage of

medical expenses are accounted for by terminally-ill persons whose lives were prolonged by expensive technology. Gerald Riley, a HCFA actuary, conducted the analysis with colleague James Lubitz and published in the 1993 New England Journal of Medicine. They found no evidence that elderly persons in the last year of life account for a larger share of Medicare expenditures today than before the onslaught of technology. In fact, Medicare paid the exact same percentage for patients in the last two months of life in 1976 as in 1988. This implies that heroic efforts to preserve life in the last months did not have a disproportionate effect on increasing the proportion of Medicare outlays. Riley says that if life-preserving efforts had become more frequent, there would have been an increase in the percentage of dollars spent in the last couple of months of life."

More data on end-of-life care included:

- 27 to 30% of Medicare payments cover the cost of care for people in the last year of life.
- 12% of Medicare spending covers people who are in the last two months.
- 10% of Medicare beneficiaries account for 70% of program spending. [44]

Reuters Health reported in October 2010 that *"health care costs at the end of life show no signs of leveling off, according to new research from the United States and Canada published in the Archives of Internal Medicine. But other trends over the past decade, including a sharp increase in use of hospice services, could point the way toward bringing these costs down while improving patient care," Dr. Jonathan Bergman of the University of California at Los Angeles, author of one of the studies, told Reuters Health.*

"We end up spending about a third of our overall health care resources in the last year of life," Bergman said. "It represents a huge avenue for improvement."

"Bergman and his team did find that hospice patients were about 20% less likely to receive high-intensity care, for example admission to the intensive care unit, two or more emergency department visits, or cardiopulmonary resuscitation. They also received fewer imaging tests, which are costly and are known to have no benefit for dying prostate cancer patients. Evidence suggests that hospice care can cut health care costs, especially for cancer patients, Berman and his team note, although they did not look at cost in their study.[45]

According to a *Wall Street Journal* analysis of Medicare data reported in July 2012, a "sliver of the sickest patients account for the majority of health care spending. In 2009, the top 10% of Medicare beneficiaries who received hospital care accounted for 64% of the program's hospital spending. Medicare patients rack up disproportionate costs in the final year of life. In 2009, 6.6% of the people who received hospital care died. Those 1.6 million people accounted for 22.3% of total hospital expenditures."[46]

Health Disparities

The U.S. Department of Health and Human Services' Centers for Disease Control and Prevention, issued a Health Disparities and Inequalities Report for the United States in 2011. It states that the existence and persistence of substantial disparities in mortality, morbidity, risk behaviors, and hazardous environmental exposures between and among segments of the U.S. populations have been well-documented. The socioeconomic circumstances of persons and the places where they live and work strongly influences their health. Educational attainment and family or household incomes are two indicators used commonly to assess the influence of socioeconomic circumstances on health. A substantial proportion of the child and adult population is vulnerable to health problems because of insufficient resources.[47]

Richard Cooper, MD, argues that it is economic disparity that drives health care utilization and therefore health care spending.

He goes on to say that "Poorer people are demonstratively sicker and cost more to treat than do economically stable people by a large margin. Therefore, the key to lowering health care costs is to reduce poverty and increase wealth." A poll commissioned by the Canadian Medical Association which was reported in an editorial of the *Globe and Mail* in August of 2012, substantiates Dr. Cooper's claims by suggesting that low-income Canadians are in significantly worse health than those with higher income and more education. The survey, carried out by Ipsos Reid, found that just 39% of those who earn less than $30,000 believe their health is excellent or good, compared with 68% of those who earn $60,000 or more. Those in the latter group also reported that they smoke less, sleep and exercise more and eat more vegetables.[48]

Another article in the *Globe and Mail* went on to say that: "One in four Canadians earning less than $30,000 annually have delayed or stopped taking prescription drugs because they did not have money to pay for the treatment. By contrast, fewer than one in 30 citizens earning more than $60,000 a year has had trouble paying for necessary medication, according to the survey commissioned by the Canadian Medical Association. "What is particularly worrisome for Canada's doctors is that in a nation as prosperous as Canada, the gap between the haves and have-nots appears to be widening."[49]

That gap is widening in the United States as well. A report in the *New York Times* magazine on August 19, 2012, describes its impact. The Census Bureau tracks a category that the government calls "deep poverty"; families are said to be in deep poverty if they earn less than 50% of the poverty line – which means around $11,000 a year for a family of four, not including food stamps or other noncash support. The number of families in deep poverty grew sharply during the recent recession and its aftermath, and in 2010, the share of Americans whose families made less than half of the poverty line hit a record: 6.7% of the population, or one in fiftenne Americans. The numbers are even higher for children, disturbingly so. In 2010, one in every ten American children lived in deep poverty."[50]

These numbers are sobering and lead to tragic consequences, including poorer health. The poor health also leads to higher health care costs and poorer outcomes.

Between 2003 and 2006 the Joint Center for Political and Economic Studies estimated the total direct and indirect costs of health inequities affecting racial and ethnic minority populations, including lost wages and productivity – exceeded $1.2 trillion.

The Urban Institute says that among African Americans and Hispanics, the health care cost burden of three preventable conditions – high blood pressure, diabetes and stroke – was about $23.9 billion in 2009.[51]

Conclusions

According to a Henry J. Kaiser Family Foundation Study in May 2012 entitled: *Health Care Costs – A Primer – Key Information on Health Care Costs and their Impact*, the U.S. spent $2.6 trillion on health care in 2010.

Half of health care spending is used to treat just 5% of the population. "A recent study (David Squires: Explaining High Health Care Spending in the U.S., May 2012) found that U.S. health care spending is higher than that of other countries most likely because of higher prices and perhaps more readily accessible technology; and greater obesity, rather than higher income, an older population, or a greater supply of utilization of hospitals and doctors.[52]

As mentioned in the Kaiser study, "another factor which may help explain rising health spending is the falling share of health care expenditures that Americans pay out-of-pocket. Between 1970 and 2010, the share of personal health expenditures paid directly out-of-pocket by consumers fell from 40% to 14%. Although consumers face rising health insurance premiums over the period which affected their budgets, lower cost sharing at the point of service likely enabled consumers to use more health care, leading to expenditure growth."

Clearly, to achieve cost savings in our health care system, experts must look at those factors that are driving health care costs above the gross domestic product (GDP), population growth and inflation.

Nearly one-third of all health care spending goes to paper work and administration; (*Newsweek*: The Cost of Hope, June 4 and 11, 2012)[53]

- Technology, which most experts agree accounts for the greatest rise in health care costs;
- Chronic conditions, which account for up to 75% of all health care costs;
- Obesity, which often leads to diabetes which begets peripheral vascular disease and coronary disease which begets congestive heart failure;
- Life style behavior including addiction
- Inefficient medical liability system
- End of life costs
- Legislative mandates – especially health insurance mandates
- Half of all health care expenditures are used to treat just 5% of the population. (It would seem that this represents the most fertile area for cost savings.)

The literature and data simply do not point to physicians as a primary or even secondary cause of rising health care costs. Physicians have been a favorite target of critics for years for cost increases, but the facts indicate otherwise.

For those who truly want to reduce the growth of health care costs in America, further examination of chronic disease conditions/ lifestyle choices, medical technology and a closer look at the 5 % of patients who account for half of all health care expenditures would be of real value. Pointing the finger at physicians for these things is fruitless, incorrect and misleading and will only serve to divert researchers from delving into the real causes.

Part three of this white paper will appear in a future issue of *Missouri Medicine.* References can be found at www.physiciansfoundation.com.