If something cannot go on forever, it will stop.¹

Such simple truths can often be elusive. Unsustainable systems by definition cannot persist, a notion which will hopefully impart patience unto those who wish to overhaul entire systems in one drastic action.² Healthcare is but one example of a system subject to overwhelming criticism. In fact, more than 80 percent of U.S. adults believe the health system needs either “fundamental changes” or “a complete rebuild.”³ Because each person is unavoidably a stakeholder, there is vast public and private interest in the topic. Healthcare is an economic concern because it represents a sizable sector of the economy by any measure. Consumption of medical care and goods accounts for the largest share of consumer spending, which is in turn the largest component of GDP (Figure 1). Expenditures are driven higher by prices, utilization, technology and demographic trends. The federal government’s budget is dominated by healthcare spending through Medicare, Medicaid and other mandatory spending programs. All of these factors make economics an important part of any discussion about healthcare.

Spending on Healthcare

National health expenditures account for about 16 percent of GDP. This number, the world’s highest, is increasing every year because expenditures are growing at a faster pace than the overall economy. This enormous industry has many stakeholders, and no one can realistically avoid interacting with and being affected by the healthcare system, whether as a payer, payee, patient or provider. “The financial burden of healthcare resides with businesses, households and governments that pay insurance

¹ Stein’s Law. Herbert Stein, a twentieth century economist, made this point in relation to the current account deficit of the United States for the first time during the 1980s.
premiums, out-of-pocket costs, or finance healthcare through dedicated taxes or general revenues." While many presume the U.S. has a private healthcare system, the public sector actually finances nearly half of it, mostly through Medicare, Medicaid and the State Children's Health Insurance Program (SCHIP), but also through various other vehicles (Figure 4). Private insurance finances only 35 percent of healthcare in the U.S. The breakdown between public and private financing of healthcare has been shifting over time, with the public portion gradually gaining share. In the same study by the Centers for Medicare and Medicaid Services, it is estimated that under current law, in just eight years there will be an equal 50/50 split between the two and not much longer before private spending is the smaller share (Figure 2). Accelerating this trend is the retirement of the baby boomers that will soon become eligible for Medicare, which has per capita costs far above the average due largely to its designated constituency, the elderly. This will further increase pressure on government budgets. Beyond private insurance and government funded healthcare, out-of-pocket expenditures are the next largest category. Thus, consumers are spending money on healthcare not only through taxes and premiums but are also funding their healthcare directly (Figure 4).

Figure 1

Medical Goods & Services As a Share of Total Consumption

Source: U.S. Department of Commerce, Department of Health & Human Services and Wachovia

Medical goods and services account for an ever-rising share of personal consumption. Expenditures on medical care and goods represent over 20 percent of total spending, far more than housing, the next largest category (Figure 3). That is, for every $100 spent, $20 goes to healthcare — in the 1960s this amount was closer to $6. In consequence, other industries suffer at the hands of the healthcare behemoth because consumption in those sectors is being crowded out. Other types of discretionary spending and especially nondiscretionary outlays are fighting for a portion of a smaller pie, which hurts the dependent industries. Healthcare is not only the largest sector; it is also the fastest growing (Figure 3). In this way, healthcare spending adds up significantly — to a point that has become unsustainable. By the end of the projection period, 2018, it is estimated that healthcare expenditures will be one-fifth of GDP or $4.4 trillion. The trend can and will most likely continue, but not indefinitely.

In a useful effort to make spending more comprehensible, the Centers for Medicare and Medicaid Services study per capita costs. The most recent data available put annual per-capita healthcare spending at $7,421.5 This distinguishes the U.S. healthcare system from other nations because the figure is greater than $2000 higher than even the next highest country, Norway, making the U.S. an extreme outlier.6 Rising per-capita healthcare costs are extremely pressing, and are dependent on many factors. Medical care price inflation is a large part of the problem, and demographic changes are also significant. Besides these two essential trends, other factors driving per capita outlays in the U.S. include utilization and service intensity, that is, more people using the system, and using it to a greater extent.

Source: U.S. Department of Commerce

5 Spending varies regionally; Massachusetts has the highest per person spending while Utah has the lowest.

The market for healthcare services is not transparent, making it difficult to comparison shop.

Healthcare Prices
Healthcare prices consistently rise at a faster rate than the overall price level, as evidenced by the Consumer Price Index for medical care, and are a fundamental reason for rising spending. The same trend is evident in the Producer Price Index, with prices rising faster in the healthcare sector than in the headline figures (Figure 5 & Figure 6). Healthcare inflation means that year after year, the same amount of money buys fewer medical goods and services such as prescription drugs, tests and physician office visits. The healthcare consumer feels poorer each year because it becomes more expensive to consume the same amount of medical goods and services. (The elderly are doubly harmed because as they age they tend to consume more healthcare products. Price and quantity increasing simultaneously can be a difficult proposition for many.) Prices are one of the main drivers of increased spending on medical care. The goods component of medical care is most easily understood in terms of prescription drugs, while services include office visits to physicians and the like as well as inpatient and outpatient hospital visits. On average, services prices have risen faster than goods prices by about one percentage point per year (Figure 5). This may be partially due to the more competitive marketplace for drugs, as well as greater (and highly publicized) availability of generic substitutes, a somewhat recent phenomenon. Meanwhile, the market for services is less transparent, making it difficult to comparison shop. This problem has been widely discussed, and proposed solutions include publicly “grading” doctors and hospitals. However, this generates significant turmoil due to disagreement on how to appropriately quantify the quality of medical care delivery. Opposing goals (such as cost efficiency versus successful outcomes) make any grading system inherently subjective, and other solutions have so far failed to take hold.

Figure 6

Figure 7

Source: U.S. Department of Health and Human Services, Department of Commerce and Wachovia

Another reason for elevated healthcare inflation is reflective of the technological advancement in medicine, which outpaces development in some other fields. New tests, screens and prescription drugs come to the market with relative frequency, and are often quite costly. Measuring price inflation is difficult because capturing increases in quality—a better test, a more effective drug—is not easily accomplished in an objective manner. The CPI seeks to measure the changes in prices holding other attributes constant. However, this is an unrealistic expectation in a rapidly changing world. Thus, rising prices may be due in part to an improved good or service that goes uncaptured. On the consumer side, the economic question of whether the marginal benefit of the new procedure or prescription exceeds the marginal cost is often unexplored—a person’s health is not quantifiable in the same
way that guns and butter are. In other words, the relatively clear trade-offs between weapons and food make decision-making easier and more efficient. In contrast, healthcare decisions tend to be made apart from their costs and benefits because consumers are often distanced from the financing process by one or more third parties (government, private insurance) and from the treatment process by medical practitioners. As discussed, clear and usable information upon which to make price and quantity choices is not readily available. Further, and appropriately, purely rational decisions are extremely difficult when a human life is at stake. There are various reasons that prices for medical services are rising faster than those for medical goods (prescriptions), but both are significantly above the overall price level in the U.S., and the trend is having major effects on spending. As mentioned, the elderly often feel the ramifications of excessive healthcare spending acutely. Next, we turn to such demographic trends that have an undeniable effect on the rising tide of healthcare outlays.

**Figure 8**

**U.S. Population of Persons Age 65 and Over**

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 65-74</th>
<th>Age 75-84</th>
<th>Age 85 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>12</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td>2020</td>
<td>14</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>2025</td>
<td>15</td>
<td>13</td>
<td>5.5</td>
</tr>
<tr>
<td>2030</td>
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</tr>
<tr>
<td>2050</td>
<td>20</td>
<td>18</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce and Wachovia

**Demographic Trends**

While it is not news that the U.S. population is getting older, this long-established fact has significant implications for healthcare spending and a variety of government programs. The most recent population estimates show that in 2010, 13 percent of the population will be over 65 years of age, and by 2040, that number is expected to grow to 20 percent. This doubling of the elderly population has a variety of repercussions (Figure 8). First, the elderly exhibit higher rates of utilization and more intense demands for goods and services, thus driving costs higher. There are more than 20 times more hospital stays registered for adults 85 and over compared to individuals
between age 1 and 17. Hospital stays, especially those admitted through emergency departments, which is common for older patients and an increasingly common access point overall, are very costly relative to the preventative care frequently administered to the young. According to the Healthcare Cost and Utilization Project (HCUP), per capita spending is more than three times higher for the elderly than the middle-aged.

In addition, life expectancy is climbing to new highs, a tribute to the technological advancements in medical procedures and the research and development of new pharmaceuticals, but also another factor driving spending. In just 20 years, life expectancy in the U.S. has risen from 75 to 78. While this number has increased, it is not an unusual level for a high-income nation. The economic result is that the elderly draw on the healthcare system for a longer period of time, further driving costs. As medical technology enables longer lives, people live longer and thus need more care—which becomes a continuous cycle. This has significant implications for mandatory spending programs such as Medicare. Medicare is the expected primary payer for 37 percent of hospital visits, which demonstrates the rapid growth toward dependency of the aging population on this system, as shown in the HCUP study. The longer beneficiaries live, the longer the period of benefits lasts, thus driving the demands on the program to higher levels and higher costs. While the good that comes from advances in modern medicine is indisputable, the scope of this paper is to focus on what drives costs.

Other trends among U.S. citizens also drive spending. Often when one problem is ameliorated, another is ready to replace it. This is evident in the process of treating diseases—advancements seem to always be met with new challenges. On a positive note, smoking was a major health problem in recent decades which contributed to rising costs, and the smoking rate is half of what it was just 25 years ago. The decline will alleviate some of the pressures driving medical spending higher, though is surely not enough to eliminate it. However, taking its place is the rising tide of obesity. The U.S. had the highest obesity rate among all OECD countries at about 35 percent in 2006. Given the time lag between the onset of obesity and the greater prevalence of obesity-related chronic diseases, we can easily anticipate that the resulting increased spending will continue. Seemingly small issues that influence spending such as these may be a simpler place to start implementing changes in the near-term, rather than the extreme alternatives of doing nothing or attempting a complete overhaul.

Perspectives on Reform
An eye toward the future sees the obvious unsustainable nature of the current system. Rising costs have become an alarming trend as medical spending accounts for an ever greater portion of total available dollars, and this trend has shown little indication of stopping. Prices for medical goods and services are rising faster than the overall level of inflation. Demographic trends do not provide much hope for the future of healthcare spending; the population is growing, aging and living longer. Further, the newly-eligible baby boomers will draw heavily on public programs.

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8 Interestingly, the average mortality for high income countries is 80, Japan leading at 83. (World Health Statistics 2008, World Health Organization)
testing their limits. There is a vast supply of medical goods and services given the rapid evolution of technology, but seemingly unquenchable demand exists, increasing with each new advance. How the scarce resources are allocated is the basis of a deep problem.

While it may be easy to recognize a flawed system, it is much more difficult to find the perfect solution. Trade-offs must be made, and one must make such decisions fully aware of the costs, benefits, and potentially unexpected ramifications of them. While there is much to dislike about the current system, an international perspective will show that many citizens across the globe are dissatisfied as well, though often for different reasons. Concerns in the U.S., such as the uninsured population and high out-of-pocket expenditures are replaced with complaints of long waits and low levels of confidence in receiving quality care. Around the world, the reality is that healthcare systems are neither entirely public nor entirely private—there is always a combination of the two, the difference often being the relative importance. In addressing weaknesses of the current system, decision-makers would do well not to lose sight of its strengths. Still, the U.S., with the highest per capita healthcare spending in the world, has neither the best quality nor the widest access. It is clear that change must—and therefore will—come. However, there are difficult and important choices that must be made in the process. It is not guaranteed that all stakeholders will be better off, and less likely that all will be satisfied. Thus, careful consideration and gradual policy changes are apt to be the most effective ways to achieve long-term solutions to this very large and growing problem. As Stein aptly states, an unsustainable course will necessarily end, with or without consent and planning.

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10 Most nations have a significant private contribution to supplement the public system. For reference, please see the World Health Organization report “World Health Statistics 2007.”

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