As the health care system struggles with these forces and the cost of advancing medical technology, its players look for a new paradigm to find the right balance between provider oversight and consumer empowerment in an attempt to avoid nationalized health care. If HMOs aren’t the answer, what is? (See chart.)

In *Redefining Health Care*, Porter and Teisberg suggest that our health care system could be improved by the following principles:

- Focusing on value, of which cost is only one component.
- More competition based on outcomes for the care delivered and paid for.
- More competition via a holistic approach to the full cycle of care to the consumer, not just for each discrete service by individual provider.
- High-quality care should be less expensive. Centers of excellence improve quality of outcomes while reducing costs. Studies show that providers who perform more transplants or deliver more neonatal intensive care unit babies have more successful outcomes.
- More transparency on pricing and outcomes to allow consumers to shop for cost and quality.

According to the 2006 Milliman Medical Index, the annual medical cost for a typical American family of four is now $13,382. Medical costs continue to increase over 10 percent per year, well in excess of the general inflation rate. As medical costs have increased, employees have continued to fund the higher portion of the health care coverage through employee cost-sharing arrangements. A typical family would pay $2,210 of this $13,382 through some form of member cost sharing.

Consumer-driven health plans are only a part of a broader health care strategy designed to control costs by changing patient, provider, and employer behaviors. The Bush administration favors a level playing field brought about by eliminating the employer tax advantage relative to individual health care as well as continuing to promote usage of health savings accounts and health reimbursement accounts. The philosophy is that of “ownership”: Members who have some ownership in these accounts will also then develop more accountability.

Creating some form of understanding and accountability with respect to health care is still considered a critical component by most. The why is easy, the how is not. It is still unclear whether a consumer-directed health plan is a panacea or a placebo.

The results of the 2008 presidential election will play a strong role in determining whether the U.S. medical market (and the insurance and reinsurance markets supporting it) will avoid significant government intervention. Each presidential candidate has his/her own prescription for the ailing health care system. The winner of the election gets to write the prescription for all 300 million of us! A Democratic-controlled White House and Congress might be a harbinger for the renewal of the cry for nationalized universal health care for the commercial marketplace as well as Medicare and Medicaid government programs.

Let’s not forget the 50 million uninsureds or underinsureds. Various states have proposed universal health care systems for their populations (California, Massachusetts). None has gained “universal” appeal yet. There is some interest in limited medical benefit plans (aka “mini-meds”). These plans hold down cost by simply limiting benefits.

Now for the bad news. There is still the threat of increased health care costs (and deaths) associated with an avian flu pandemic. Although these fears wax and wane with the reporting of the spread of cases in Asia, this still remains a significant threat to the United States. Trying to predict the effect is roughly equivalent to predicting the impact of a Y2K system failure before Jan. 1, 2000. Let’s hope this threat is as benign as was Y2K.
Managed-Care Trends
Employers still express strong interest in wellness and disease management programs as possible ways to control rising health care costs. Initial concerns regarding the upfront expenditures and the return on investment for such programs have given way to an environment where employers will try most anything to reduce costs.

More and more specialty companies are focusing on managing chronically ill patients for one or more diseases. Although these companies don’t provide medical treatment, they attempt to complement the case management programs in place with the health care plans. Typical chronic diseases addressed in disease management programs include:

- **Chronic obstructive pulmonary disease (COPD).** This refers to two lung diseases, chronic bronchitis and emphysema, that are characterized by obstruction to airflow that interferes with normal breathing;
- **Coronary artery disease (CAD).** This occurs when the arteries that supply blood to the heart muscle (the coronary arteries) become hardened and narrowed;
- **Congestive heart failure (CHF).** This is a condition in which the heart is unable to adequately pump blood throughout the body and/or unable to prevent blood from “backing up” into the lungs;
- **Asthma.** This is a chronic disease of the respiratory system in which the airway is blocked and creates an excessive amount of mucus, often in response to one or more triggers;
- **Diabetes.** This is a disease in which the body does not produce or properly use insulin.

The catastrophic medical excess insurance and reinsurance market pricing and underwriting are driven more by acute conditions such as traumas, transplantation, and neonatal risks. The following trends are noted:

- **Cancer.** The rate of cancer incidences is increasing from many forms of cancer, such as breast, prostate, skin, thyroid, leukemia, kidney, and non-Hodgkin’s lymphoma. However, thanks to prevention, early detection, and treatment, death rates are declining for most common forms of cancer.

A Paradigm Shift in Health Care Direction

<table>
<thead>
<tr>
<th></th>
<th>Old Paradigm</th>
<th>New Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choice</strong></td>
<td>Restrict patient choice through in-network features</td>
<td>Promote choice by providing patient and provider information to improve health</td>
</tr>
<tr>
<td><strong>Provider management</strong></td>
<td>Micromanage provider process</td>
<td>Reward providers based on results</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Minimize cost per treatment through network fees and out-of-network limits</td>
<td>Maximize the value of care across the care continuum</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td>Complex paperwork and administrative requirements</td>
<td>Minimize paperwork and administration</td>
</tr>
<tr>
<td><strong>Competition among health plans</strong></td>
<td>Compete on costs and network fee structures</td>
<td>Compete on member health results</td>
</tr>
</tbody>
</table>

(Source: Redefining Health Care by Porter & Teisberg)

**Drugs.** A significant contributor to medical trends is new chemotherapy drugs. Erbitux®, for example, one of the most expensive drugs available for the treatment of colon cancer, costs $17,000 per month. Other high-cost chemotherapy drugs include Avastin and Herceptin.

Another significant pharmacy cost driver is the use of clotting factor replacements for hemophilia. The average cost for a prescription for clotting factor deficiencies is now over $30,000. There are approximately 18,000 Americans suffering from hemophilia with an annual estimated treatment cost of over $125,000 per patient per year.

According to the Agency on Healthcare Research and Quality, total spending for medications in outpatient settings continues to skyrocket, increasing from $72 billion in 1997 to $191 billion in 2004, a 165 percent increase. Annual prescription drug costs for people aged 65 and older increased from $819 to $1,914 over that same period, a 134 percent increase.

**Maternity.** Factors contributing to a rise in premature births include advancing maternal age and increased frequency of multiple births associated with greater use of fertility drugs and the impact of obesity and substance abuse on maternity risks.

Approximately 3 percent of all live births involve multiple births of (premature) infants, says the National Center for Health Statistics/Centers for Disease Control and Prevention. In addition, 8 percent of all live births involve low-birth-weight infants (< 2500 grams). The cost of care for newborn infants increases geometrically as the birth weight declines. A “normal” delivery costs under $5,000 for a newborn with a birth weight of 3,400 grams (approximately 7 to 8 pounds).

According to the University of Minnesota Center for Early Education & Development, total long-term costs for health care and special education for extremely low-birth-weight babies that survive exceed $350,000.

Low birth weight also has a high correlation with infant disabilities because many pre-term infants suffer from visual and hearing impairments, attention deficit hyperactivity disorder (ADHD), cerebral palsy, and mental retardation. In addition, many have special education needs. Hence, the majority of pre-term infants have health care issues that will tax the health care system over time.

**Transplants.** The number of transplants continues to rise. Although the number of transplants has doubled in the past 10 years, the number of people on the waiting list has tripled in the same timeframe. Improved transplant technolo-
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Transplant recipients are also living longer owing to advances in immunosuppressant regimens. Although there is still a shortage of donor organs, improved education programs continue to increase the frequency of transplants.

The U.S. government wants to trim the organ transplant waiting list, which has been a considerable problem for many years. The waiting list is close to 100,000, and there are fewer than 3,000 donors, according to the United Network for Organ Sharing. Therefore, there will be a push for more organ donors, and this should increase the number of transplants.

In addition, there is some movement toward reallocation of the available transplant centers; they’re plenty busy performing at the current level of transplantation.

The 2006 Milliman report on U.S. organ tissue transplant cost estimate and discussion indicates that transplant frequency across all ages for single-organ transplants increased 3 percent in 2005 while multi-organ transplants increased 9 percent. A significant increase was noted in bone marrow transplants for the 65-plus age population. The average transplant costs across all transplants increased 15 percent during 2005. The average cost of an organ transplant now exceeds $350,000.

Reinsurance Market Trends

Reinsurance opportunities for the government sector continue to expand. Medicare Advantage plans currently enroll over 6 million members. Managed care plans enroll more than 17 million Medicaid beneficiaries. Many of these members are “dual eligible,” lower income (primarily) senior citizens with disabilities who are enrolled in both Medicare and Medicaid. These totals should increase if the president and Congress continue to promote private-market solutions to manage the considerable government health care liabilities.

Medicaid reinsurance opportunities also depend on individual state actions and funding. Although many states had tight budgets several years ago, they’ve maintained the viability of these programs with appropriate funding increases supported by state and federal tax dollars. Healthy Kids is one such program that continues to expand.

Two of the top four HMO and provider excess reinsurers were sold to other large players: Employers Reinsurance Corp. (ERC) to Swiss Re, Allianz to Houston Casualty Corp. (HCC). Allianz exited health care in favor of wealth protection and wealth accumulation, and General Electric sold ERC in favor of less cyclical business with more growth potential. Swiss Re maintained ERC as its health care arm. In the employer stop-loss market, Hartford Life sold its business to United Healthcare subsidiary National Benefit Resources.

Declines in HMO enrollment have occurred as enrollment has grown in preferred provider organizations (PPOs) that offer more flexibility in selecting providers. In an environment where care is less managed, it’s inevitable that care will leak out of network and increase the frequency and severity of catastrophic claims. Health care cost and health care access are still negatively correlated. HMOs have adapted their provider networks and medical management capabilities to a managed-care “lite” environment to deal with public relations issues associated with health care that is too tightly managed.

Milliman/Summit Re estimates that the number of claims exceeding $1 million continues to rise at a dramatic rate.

A major contributing factor to increased reinsurance premiums is the dreaded “outlier” provision that allows cost-effective per diem or diagnosis-related group (DRG) reimbursement arrangements from hospitals to revert to a percentage of billed charges above a certain dollar threshold for each claim.

Claims in Excess of $1,000,000 per Million Lives

<table>
<thead>
<tr>
<th>Year</th>
<th>Claims per Million Lives</th>
<th>Average Claim</th>
<th>Claim Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>5.3</td>
<td>$1,284,647</td>
<td>$ 6.81</td>
</tr>
<tr>
<td>2001</td>
<td>4.9</td>
<td>$1,442,423</td>
<td>$ 7.07</td>
</tr>
<tr>
<td>2002</td>
<td>4.9</td>
<td>$1,558,345</td>
<td>$ 7.64</td>
</tr>
<tr>
<td>2003</td>
<td>20.4</td>
<td>$1,202,054</td>
<td>$24.52</td>
</tr>
<tr>
<td>2004</td>
<td>28.3</td>
<td>$1,180,732</td>
<td>$33.41</td>
</tr>
<tr>
<td>2005</td>
<td>37.9</td>
<td>$1,169,833</td>
<td>$44.29</td>
</tr>
<tr>
<td>2006</td>
<td>38.3</td>
<td>$1,473,922</td>
<td>$56.45</td>
</tr>
</tbody>
</table>
Reinsurance market responses to these catastrophic claim trends are:
■ Higher everything: higher premium rates, higher deductibles, higher average daily maximum limitations, higher maximum benefits.
■ More attention is paid to determine which managed-care network adds value in affecting large claim severity and frequency. Special attention is paid to outlier provisions for tertiary care facilities.
■ Continued emphasis on plan medical management capabilities through specialty networks, centers of excellence, neonatal case management programs, specialty pharmaceutical vendors, and disease management programs.
■ Specific developments in the catastrophic medical excess market segments are highlighted here:

<table>
<thead>
<tr>
<th>Catastrophic Medical Excess Market</th>
<th>Premium Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMO</td>
<td>$200–300 million</td>
</tr>
<tr>
<td>Provider</td>
<td>$85–125 million</td>
</tr>
<tr>
<td>Employer Stop Loss</td>
<td>$4–5 billion(^1)</td>
</tr>
<tr>
<td>Other medical excess (including Blues)</td>
<td>$150–200 million(^2)</td>
</tr>
</tbody>
</table>

\(^1\)Excludes Blues, United, CIGNA, Aetna (“BUCA”)\(^2\)Excludes quota share business

*Employer stop loss.* The stop-loss market is traditionally called “reinsurance,” though today most of the business is written by the direct writers who aren’t in the reinsurance business. They book the premium as “direct written.” This is the largest medical excess market, with estimated total premiums of between $4 billion and $5 billion. Reinsurers of employer stop-loss programs remain actively involved in managing these programs. Capacity is carefully provided and reviewed on an ongoing basis. It’s very difficult for startup programs to obtain backing. The current market is soft; the rates continue to be very competitive with pressure on profit margins.

Self-funded employer groups are most concerned about rising medical costs. They must pay careful attention to any differences between their employer stop-loss policy and their own plan document to avoid differences in conditions (i.e., reimbursement provisions that don’t match their underlying costs).

In addition, employers and their third-party administrators (TPAs) must carefully review disclosure statements and any laseringing of individuals to fully understand what risks they retain to effect coverage for their employee benefit programs as

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evidenced by their ERISA plan document. (Lasering is the setting of an additional deductible on stated person(s) with high expected claims in lieu of charging additional premium.) Lasering practices are most prevalent in this market.

Stop-loss writers are most concerned with the competitive nature of the product, which is viewed as a commodity. Pricing concerns include hospital overcharges and eroding PPO value. The discounts are increasing, but the chargemasters (pricing lists for hospital procedures) are increasing much faster, creating leveraged trend increases on employer stop-loss premiums.

**Carrier medical excess.** There are fewer reinsurance carriers involved in small-group and individual products. This is due to the relatively significant amount of market knowledge and resources that is required to be successful in these markets on both a direct and reinsurance basis. There are more reinsurance participants in the larger-group medical portfolio excess market because this market is easier to access and is less resource intensive. This market is estimated at $150 million to $200 million, excluding quota-share deals of larger scope.

The direct writers being reinsured are most concerned about the competitiveness of the marketplace, especially from the giant chains, such as the Blues, United, CIGNA, and Aetna plans (commonly referred to as BUCA). There is consolidation in the market is estimated at $75 million to $125 million). Most carriers underwrite medical excess than a specialty line such as HMO excess. The business can also be accessed with minimal staffing resources.

**HMO excess.** The HMO excess market is a niche segment of the medical excess marketplace. The HMO market is estimated at $200 million to $300 million of premium. Top issues for HMOs include declining enrollment, less ability to manage care, and more competition from PPOs. HMOs also look for product differentiation and alternative revenues to diversify and survive.

Reinsurers are interested in underwriting carrier medical excess for several reasons. These direct writers bring a long-term focus and are looking for a traditional reinsurance relationship with risk transfer and partnership services. This is a relatively stable market with established distribution channels for a short-tail business with credible pricing data available. It’s perhaps easier to underwrite medical excess than a specialty line such as HMO excess. The business can also be accessed with minimal staffing resources.

Although there is considerable consolidation among clients owing to acquisition activities of major chains that buy no reinsurance, there is some market expansion from increased government programs for Medicare and Medicaid. The primary issue facing HMO excess writers includes this increased competition due to consolidation, as well as increasing claim severity and frequency—a problem shared by all lines.

**Provider excess.** The provider excess market is even more specialized. It’s roughly half the size of the HMO marketplace, as there are fewer provider capitation arrangements today. The number of carriers providing capacity in this market is less than in the HMO and employer stop-loss markets. This market in particular is heavily controlled by reinsurance brokers.

This is the smallest medical excess market by premium (estimated at $75 million to $125 million). Most carriers underwrite provider excess to diversify product lines and to capitalize on the new opportunities related to Medicare and Medicaid risk as provider entities take government capitation.

Most reinsurers still question the ability of the provider groups to fully understand their capitation agreements and manage their risks. This is true particularly as claim severity and frequency continue to rise.

In summary, the catastrophic medical excess market is still cyclical, changing, and challenging. Can the U.S. health care system heal itself, or does it need to be put on its heels? Consumers of health care have been crying for change. The cries are getting louder. The real question is, who will answer their pleas—the private sector, government, or some combination thereof? The unfolding drama will affect the health, even survival, of the U.S. medical excess market. Stay tuned for more details. Film at 11.