



Health Watch

“For Professional Recognition of the Health Actuary”

The 2007 Health Policy Summit: Celebrating 25 Years of Health Affairs

by Grady Catterall

About mid-way through the Health Policy Summit held on Nov. 1, 2007 in Washington, D.C. in honor of *Health Affairs'* 25th anniversary, it hits me: this is a big deal. Here's how you know: J. D. Kleinke, a nationally recognized speaker on health care innovation, a contributor of a dozen or so *Health Affairs* articles himself, and an author whose books (*Bleeding Edge: The Business of Health Care in the New Century* and *Oxymorons: The Myth of a U.S. Health Care System*) are considered “required reading” by many in the field, is attending the conference as...a member of the audience. Just like me. At most gatherings of this sort, Kleinke would be the keynote speaker, but here he's just one of the crowd. That's because the auditorium at the Ronald Reagan Building is filled with so many other health care luminaries that at least a few of that elite company can just sit back and enjoy the proceedings.

For me and all the other health policy junkies in the room, it's like being at a banquet where they're serving 20 or 30 five-star, world-class, gourmet-level entrees. And we don't even have to pick and choose; there's room on the plate (but just barely) for all we can eat, even if it's a little bit of everything.

The day begins with the presentation of awards “for bipartisan health policy collaboration” to Senator Max Baucus (D-MT) and Senator Chuck Grassley (R-IA). As the current and former chairman (respectively



of the Senate Finance Committee, these two have held more influence over the Medicare and Medicaid programs than all but a handful of government officials over the last few years. Like most members of The world's greatest deliberative body, Senators Baucus and Grassley are far too busy to stick around for long—which is why the awards presentation has been squeezed into an 8 a.m. time slot, prior to the official “Introduction and Welcome” presentation.

With the senatorial awards taken care of, Leonard Schaeffer and James Robinson can now come out and officially welcome us to the Health Policy Summit. Schaeffer, the founding chairman and former CEO of WellPoint, is the principal sponsor—personally, not through his company—of today's

(continued on page 26)



Grady Catterall, FSA, MAAA, is senior staff actuary at Kaiser Permanente in Rockville, Md. He can be reached at Grady.C.Catterall@KP.org.

Published by the Health Section Council
of the Society of Actuaries

475 N. Martingale Road, Suite 600
Schaumburg, IL 60173-2226

ph: 847.706.3500 • f: 847.706.3599 •
Web: www.soa.org

This publication is free to section members. Current-year issues are available from the Communications Department. Back issues of section publications have been placed in the SOA library and on the SOA Web site: (www.soa.org). Photocopies of back issues may be requested for a nominal fee.

Facts and opinions contained herein are the sole responsibility of the persons expressing them and should not be attributed to the Society of Actuaries, its committees, the Health Section or the employers of the authors. We will promptly correct errors brought to our attention.

2008 SECTION LEADERSHIP

Jim Toole, Chairperson
Jennifer Gillespie, Vice-Chairperson
Susan Pantely, Secretary/Treasurer
Daniel Bailey, Council Member
Joan C. Barrett, Council Member
Grady Catterall, Council Member
Beth K. Grice, Council Member
Jodie L. Kercheval, Council Member
Barbara P. Niehus, Council Member
Sudha Shenoy, Council Member
John Stenson, Council Member

Gail Lawrence, Editor
ph: 515.224.4380
LawrenceConsulting@mchsi.com

Ross Winkelman, Editor
ph: 303.862.6455
rossw@wakelyconsulting.com

Jill Leprich, Project Support Specialist
ph: 847.706.3645
f: 847.706.3599
jleprich@soa.org

Angie Godlewska, Graphic Designer
ph: 847.706.3548
f: 847.273.8548
angie@kredodesign.com

Kathryn Wiener, Staff Editor
ph: 847.706.3501
f: 847.706.3599
kw Wiener@soa.org

Meg Weber, Director, Section Services
ph: 847.706.3585
f: 847.273.8585
mweber@soa.org

Steve Siegel, Research Actuary
ph: 847.706.3578
f: 847.273.8578
ssiegel@soa.org

Copyright © 2008, Society of Actuaries
All rights reserved.
Printed in the United States of America.



SOCIETY OF ACTUARIES

CONTENTS

OPINION

- 3 Chairperson's Corner
Actuaries Advancing Public Health
Jim Toole
- 6 National Health Care Reform: The Case for a
Public Solution
Lawrence Gostin
- 8 The Crisis in American Health Care
Ian Duncan
- 12 Reflections on Health Care Financing and Benefits
in the U.S.
Anna M. Rappaport
- 15 Letter from the Editor ... Are We Over Treated and
Over Dosed by Our Health Care Industry?
Gail M. Lawrence

FEATURES

- 1 The 2007 Health Policy Summit: Celebrating 25
Years of *Health Affairs*
Grady Catterall
- 16 Medicare Advantage—Future Benchmarks
Daniel Bailey
- 18 Timing's Everything: The Impact of Benefit Rush
Joan C. Barrett
- 20 Navigating New Horizons: An Interview with Cori
Uccello
Sarah Lawrence
- 23 SOA Releases New Long-Term Health Care Cost
Trends Resource Model
Steven Siegel
- 24 Soundbites from the American Academy of
Actuaries Health Practice Council
Heather Jerbi

ANNOUNCEMENTS

- 5 CERA
- 14 2008 Health Spring Meeting
- 22 2008 DI & LTC Insurers' Forum
- 32 SOA Boot Camps
- 35 Research
- 40 Health Section Announcements

Actuaries Advancing Public Health

by Jim Toole

The Society of Actuaries is an educational, research and professional organization dedicated to serving the public and its members. Putting the interests of the public first is one of the attributes of a profession; finding volunteer outlets to serve the public is one of the manifestations. The Actuarial Foundation provides opportunities for actuaries to volunteer teaching math to kids. But we are more than mathematicians. We are business professionals specializing in the analysis of risk. Doctors, lawyers and CPAs have all developed sophisticated, highly organized mechanisms to donate their professional time pro bono. In what ways can we as actuaries give back using our special gifts?

There is no denying actuaries give selflessly to the profession, but we lack a formalized structure to give back to our communities. As individuals, many of us are actively involved in our schools, our houses of worship, our communities at large. With our numerical acumen and ability to communicate same, we often find ourselves playing leadership roles within these organizations. Yet we struggle to give back in ways that more directly take advantage of the full range of our professional skills.

But more to the point, in what ways does the health discipline serve the greater public, not just the insured public? Doctors, nurses and pharmacists all have scores of choices to donate their time locally or globally. How many of us get to use our skills to improve the health of our communities?¹ Right around the corner is a building most of us have probably never thought to visit filled with dedicated professionals that serve as ground zero for promoting the health of the largest, most diverse risk pool around.

No, it isn't the hospital. It is your local public health department.

What is Public Health?

Public health is the science of protecting and improving the health of populations through education, promotion of healthy lifestyles, and research into disease and injury prevention. Public health helps all members of a community, not just those who are less fortunate, achieve a healthier lifestyle. In contrast, clinical professionals such as doctors and nurses focus primarily on treating individuals, *after* they become sick or injured.

There is an old adage—what is not addressed in public health ends up in health care. Public health approaches the problem from two angles: creating the conditions for people to be healthy, and maintaining the structures that support health improvement. Through prevention and education, public health is the foundation of individual health. Some of the biggest public health challenges today surround preventing and reducing the consequences of chronic diseases such as diabetes, asthma and cardiovascular disease.

Public health research is critical for the advancement of health. The impact of public health is and has been far reaching. Despite our fascination with the delivery of high-tech, interventionist health care, public health efforts have been responsible for more than 80 percent of the longevity gains in the United States in the 20th century.

Just as the interstate system is the backbone of commerce, public health is the infrastructure upon which the health of the nation rides. Not unlike our transportation grid, our public health

(continued on page 4)



Jim Toole, FSA, MAAA, is a managing director, life & health, for MBA Actuaries in Winston-Salem, N.C. He can be reached at jim.toole@mbaactuaries.com.

¹ Yes, there is an "Actuaries without Borders," but could you really imagine a country wanting to import our health care system?

infrastructure has long been neglected. At 1 to 2 cents on the health care dollar, spending has not kept up with the needs for proper maintenance, much less investing enough to counter the health challenges of the new century. The cumulative results of a myriad public health decisions in the last 50 years can be seen writ large in the explosive rise of chronic diseases including asthma, obesity, and diabetes.

... health actuaries can clearly demonstrate the business case for public health in terms of money saved down the road.

How Can We Help?

Actuaries, of all professionals, surely understand the value of prevention. Present value is our stock in trade. Whereas policymakers are sometimes unable to get past the up-front investment in prevention to understand its long-term benefits, health actuaries can clearly demonstrate the business case for public health in terms of money saved down the road. Study after study demonstrates the link between health, education and productivity. Clearly, cost savings are not just to the public sector; hospitals, health care plans and ultimately the business community all benefit when we invest in community health.

The health issues facing each community are unique. There are no one size fits all solutions. It takes dedicated teams of professionals and community volunteers to identify, scope and implement programs and policy change. Many public health departments in mid-size or small municipalities do not have the budget to keep an epidemiologist on staff. Communities place their faith in good epidemiological research to identify issues and trends, and the effective allocation of resources by informed policy makers to address them. Unfortunately, too often the research is under funded and the policy makers are poorly (or willfully) ill-informed.

This is where actuaries add valuable perspective. Dr. Bobbie Berkowitz, director of the National Institute of Health (NIH) funded Center for the Advancement of Health Disparities Research at the University of Washington, defines public health competencies that clearly overlap with actuarial competencies, including:

- Analytic assessment;
- Communication;
- Policy development & program planning;
- Financial planning & management skills;
- Leadership & systems thinking.

Actuaries are respected in the business community. Merely becoming involved sends the message that public health is an important endeavor. A public health message delivered by business professionals can carry great weight in the community. Actuaries are experts at communicating complex issues to the insurance audience; effectively communicating the meaning and implications of research results to more diverse community stakeholders is a challenge actuaries should welcome to improve broader communication skills. Margaret Stanley, executive director of the Puget Sound Health Alliance, speaks about the "neighbor test." If you can't explain it to your neighbor, you probably need to hone your message.

Why Should We Help?

The primary objective is to help improve the health of our communities, but there are numerous benefits for the discipline to becoming involved at the base of the U.S. health care system. From a purely selfish standpoint, this is an opportunity to inform the public health community, as well as the community at large, as to the value-add that actuaries bring to the table. No less important, this is an opportunity for us to get an education on the other piece of the picture: the needs and challenges facing the underpinnings of the health of our communities. This broader knowledge will of course inform our ability to perform our work, to the benefit of the

system overall. Most important, the discipline fulfills its role of serving the public first, not just the insured public.

The health discipline is somewhat introspective in that we focus almost entirely on the insured population. In that respect, we are more often supporting the corporate interests than the public's'. This is an opportunity to educate the profession of the need to be perceived as a balanced participant in the health care system in the United States rather than biased players with a single focus.

Healthy populations are a critical component of reducing the cost of health care. Employee satisfaction can be enhanced and insurance costs lowered through programs incorporating popula-

tion-based health care strategies. Actuaries can help build partnerships among public health, health care and private sector professionals with an eye towards a prevention agenda for health improvement. We have the knowledge. The question is do we have the courage and can we muster the passion? I encourage each of you to open a dialogue with public health officials in your county, city or state in the next year. I will hope you will share your experience with me and the profession. Actuaries can make a difference, one community at a time. 📧

Actuaries
Risk is Opportunity.®



CERA
Chartered Enterprise Risk Analyst

A Roadmap to Your Future.

The **Chartered Enterprise Risk Analyst (CERA)** credential is the most rigorous demonstration of enterprise risk management available.

Did you know that your expertise in the field of enterprise risk management may qualify you for the CERA credential via the **Experienced Practitioner's Pathway**?

To learn more about how your experience can qualify you to earn this credential, visit www.ceranalyst.org.

National Health Care Reform: The Case for a Public Solution¹

by Lawrence Gostin



Is the U.S. health care system in crisis? Conservative commentators say “no” because they can always find ways to minimize the severity of the unconscionably large number of Americans who have no health insurance. But it is important to put yourself in the position of a person who lacks full access to health care. It is all too easy for an individual of high socioeconomic status, with a full set of health benefits, to discount the pain caused by the lack of access to health care. But if they put themselves in the position of vulnerable persons they would understand that to these Americans, there is a crisis: the mother with a preexisting condition such as cancer, diabetes, or heart disease who cannot obtain coverage; the child in a low-to-middle income family who is not eligible for SCHIP; the unemployed man or woman with no employer based health coverage and ineligible for Medicaid; the underinsured who has only bare bones health coverage but has costly chronic conditions. For these, and many more Americans, the health system is in a crisis. And it is just too flippant to say they can go to an emergency room, which we also starve of funds.

If conservative commentators cannot win on this argument, they usually try scare tactics where they associate any attempt at comprehensive reform as, you name it: socialized medicine, big government, Hillary Care, illegal immigration or anything that will frighten Americans into thinking that they will lose the privileges associated with their current health care insurance. This is so despite the fact that there are many successful examples of these kinds of “socialized” systems in the United States. For example, the Veterans health care system is akin to a national health service, Medicare is akin to a single payer program, and so on.

Americans have been taught that they should not have to give anything up so that the less advantaged can have more. But the hard truth is that we will have to give something up in exchange for a humane compassionate society. I am sorry if that sounds too “liberal,” but the truth is that there are hard tradeoffs entailed, and this country can afford to provide health care to its entire population.

There is a third hobbyhorse of conservatives. The story usually goes something like this: “Everyone comes to America for high quality health care.” But this is not quite true. Actually, the world’s rich also go to major hospitals in Europe, where countries do guarantee health care to all. And Americans themselves now go to places like India to get good quality care at more affordable prices. We can’t be so jingoistic as to think that we are the best and cannot learn from other countries. The truth is that America is the outlier in the world—the only developed country without a national health system. I am not making the claim that the United Kingdom, Canada, Germany, Japan, and many other countries have perfect systems, but we could learn from them.

So, the central question is, how can we truly measure the American health care system so that



Lawrence Gostin is associate dean and the O’Neill professor of global health law at Georgetown University Law Center in Washington, D.C. He can be reached at gostin@law.georgetown.edu.

¹ My thanks to Michael Gottlieb, O’Neill fellow for national and global health law, for superb research and writing assistance. For an examination of many of these issues, see Lawrence O. Gostin, National and Global Health Law: A Scholarly Examination of the Most Pressing Health Hazards, *Georgetown Law Journal* (2008) 96: 317-329.

we can have a rational debate in this country? The key measures of any health care system are access, fairness, cost, quality, and choice. Americans like to think that we have the best health care system in the world. But the United States health care system, by these measures, is not meeting the health needs of the population. The data are all too familiar, but the underlying indicators of success have been stubbornly resistant to change: nearly 50 million uninsured, including more than eight million children; the uninsured population rising by nearly six million from 2001 to 2005; and 16 million adults underinsured. The high rates of the uninsured and underinsured have profound implications for social justice, disproportionately affecting the poor and vulnerable: 73 percent of the underinsured have annual incomes below 200 percent of the federal poverty level. Low socioeconomic status (SES) Americans are also much more likely to be ill and die young. And the poor, particularly ethnic and racial minorities, receive lower quality care, with poorer health outcomes.

Such health disparities are well documented and affect African Americans, Hispanics, Asian Americans, and Native Americans. Minority groups in the United States have a higher incidence of chronic disease, mortality, and poor health outcomes as compared with whites. Cancer incidence, for example, is 10 percent higher among African Americans than whites.

Consuming \$2 trillion, or \$6,700 per person, total health care spending represents 16 percent of the gross domestic product (GDP), and is projected to rise to \$4 trillion, or 20 percent of GDP, by 2015. Part of these costs is attributable to discretionary private spending, but the economic burden still adversely affects the Treasury, with government bearing 44 percent of total costs through public programs. And 30 percent of health care dollars—more than \$1,000 per capita—is spent on administration. Total health care costs, as well as administrative costs, are considerably higher in the United States than in other industrialized countries. Canada and France, for example, spend roughly half of what the United States spends per capita on health care with excellent results.

Private insurers, moreover, spend large sums fighting adverse selection, trying to identify and screen out high-cost customers. Systems such as Medicare, which covers every American 65 or older, or the Canadian single payer system, which covers everyone, avoid these costs. In 2003, Medicare spent less than two percent of its resources on administration, while private insurance companies spent more than 13 percent. Paperwork imposed on health care providers by the fragmentation of the U.S. system costs several times as much as the direct costs borne by the insurers.

Despite the enormous amount spent in the United States on health care, there is little evidence of higher quality care compared to other developed countries, and even compared to some developing countries. The World Health Organization ranks the U.S. health care system 37th in the world, and Americans' overall health 72nd among 191 member states. Comparative data also show that the United States ranks low

The high rates of the uninsured and underinsured have profound implications for social justice, disproportionately affecting the poor and vulnerable: 73 percent of the underinsured have annual incomes below 200 percent of the federal poverty level.

among OECD countries in critical areas such as life expectancy and infant mortality. And the Institute of Medicine estimates that medical errors cause as many as 98,000 avoidable deaths annually. Hospital capacity continues to decline—with nurse shortages impacting both the quality and economics of care—while demand continues to surge. The CDC reports a 26 percent increase in ER visits from 1993 to 2003. In those same 10 years, the number of available ERs nationwide has decreased by 12.3 percent and 90 percent of hospitals are considered at or beyond capacity.

(continued on page 29)

The Crisis in American Health Care

by Ian Duncan

At the recent SOA Annual Meeting in Washington, D.C., I participated in a panel discussion about the crisis in American health care. I was asked to represent a position that there is no crisis. The following article is taken from my prepared remarks.

I am delighted to participate on this panel about American health care. I represent several different perspectives:

1. I am a health actuary who works with clients in the area of managed care outcomes, in several different countries.
2. I actually purchase health care on behalf of my employees.
3. In my career I have lived in four different countries under four different health care financing systems. So I have a broader perspective than most individuals.
4. I was trained as an economist before I became an actuary, and I am interested in the power of markets to provide signals that optimize behavior and maximize satisfaction.
5. Finally, I was recently honored to be appointed by Governor Deval Patrick of Massachusetts to the Board of the Commonwealth Connector Authority, the government agency charged (under Governor Mitt Romney's reforms) with assuring the provision of affordable health-care to the previously-uninsured who are now required by law to purchase coverage. I am also on the board of a New York Health Insurer that has been particularly successful in providing coverage to independent workers, 60 percent of whom previously had no health insurance.

I say all this to establish my *bona fides*, since I am defending a position that I suspect has

relatively little support, especially among the wider public.

Let's begin with the title of this panel: the crisis in American health care. I agree that there are some serious issues in American health care, but these are issues that the system could correct on its own, without wholesale, radical change. Stop and think a moment: what exactly do we mean when we say that there is a crisis? Turns out, when you examine the proposition, there isn't a consistent view of what "the crisis" is. There are many different problems to which critics point—access, affordability and the uninsured. But crisis is not a collective noun for a lot of problems. Crisis is an overworked word—there has certainly been a dumbing down of the crisis concept in my lifetime. Back in 1938—before I was born and when the word was used more sparingly—Munich was labeled a crisis, because the world was on the verge of a world war. The Cuban Missile Crisis, which I do remember, was a very scary time (adults appeared to be upset and whispered a lot). That deserved the crisis label. But now, everything is a crisis. There's Hurricane Katrina, obesity, diabetes, poor school performance, the sub-prime mortgage defaults, and the list goes on. The BBC had a headline recently on their Web site: "Obesity Crisis: The New Global Warming?" which manages to capture two crises for the price of one. This hysterical approach may help to sell newspapers (an industry that, due to falling circulation is in, well, crisis!) but doesn't make for sober substitution of facts for appearances. So we should examine what causes a problem to escalate from just that—a problem—to the level of a crisis.

I said I was glad to be invited to speak on the panel as an employer. As an employer, I have to deal with many costs in my business. And they are all a problem. But my health plan expense is small in comparison to other expenses. If you want to talk about problems, let's look at some of those that I face. First, I employ actuaries, who



Ian Duncan, FSA, FIA, FCIA, MAAA, is president of Solucia, Inc., Hartford, Conn. He can be reached at iduncan@soluciaconsulting.com.

are not a cheap resource. Then, there are all the other services like computers and internet and communications. These are expensive resources with which you receive differing degrees of bad customer service when things go wrong, which they invariably do (not the actuaries, of course). But all of my business expenses pale in comparison to the different government departments that I deal with. At least when I deal with my vendors there is competition and I can get a vendor's attention because the market gives me alternatives. Not so with government.

The single biggest monthly expense in my business, after salaries, is government in its many forms. We hear a lot about the crisis in health care expenses facing employers; I don't understand why we don't hear more about rising taxes, because for me the latter is a bigger issue. To me it contrasts sharply with my health care expenditures. In neither case do I like paying the bills. But at least I get a tangible benefit for my health care expenditures. I have bargained with my employees for a health plan that they are willing to live with, and a level of expense that I can afford to absorb in the business. When my carrier comes back at the end of the year and asks for a premium increase, I have the flexibility to change plans, carriers, and contribution strategy—I have a lot of flexibility. Contrast that with the problems I have with expenses over which I have no control and no room to negotiate, like taxes. My employees have a lot of flexibility too—they can come into my office and ask for different benefits. Ultimately, if they don't like my plan, they can quit and go work for an employer who offers a more attractive plan. That, I would submit is the genius of the U.S. system. It offers employers and employees flexibility, leading to a negotiated result that isn't necessarily what each party wants ideally, but is a compromise that each party can live with.

One of the crises we hear about that is easy to dismiss is the percentage of the gross domestic product (GDP) that is spent on health care. This is largely a crisis manufactured by those



with a political objective of trying to change the system, since the percentage of GDP spent on health care doesn't have much effect on the average worker or the average employer. The principle of revealed preference says that if U.S. consumers and employers choose to spend relatively more of their incomes on health and relatively less on widgets, this decision will raise the percentage of GDP going to health. The market determines the percentage and, while we may not agree with individual preferences for expenditures, the market achieves equilibrium. "But," I hear you saying, "the United States spends so much more than other western democracies!" The difference between the United States and all other systems when it comes to health care expenditures is that all other countries impose artificial caps, to a greater or lesser degree, on their expenditures. The United Kingdom has starved its National Health Service of investment for years, because the government as funder has so many other calls on its revenue. The result is patient dissatisfaction, long waiting lists, dismissal of thousands of junior doctors, etc. The United Kingdom has recently increased significantly the funding of its health service in response to public pressure. However, one difference between the United Kingdom and United

(continued on page 10)

States that actuaries will appreciate is that health service workers in the United Kingdom are all employees of the government and therefore, eligible for the government's unfunded pension scheme. As the number of workers retiring increases, the call on the extra funding to pay for pensions will increase more than proportionally. Contrast this with U.S. (private) health care providers who generally fund their pension plans. Canada is an example of a country that actually *forbids* its citizens to spend their own money on health services (for which there is clearly a pent-up demand). Did you know, for example, that Canadians can purchase MRI's for their pets but not *themselves*?¹ So I would submit that the hysterical commentary one reads about the percentage of GDP spent on health care has it exactly wrong: the United States provides a guide as to what a free market would result in, while other countries are spending at less than the optimal level.

"Compulsory" insurance doesn't guarantee coverage or access any more than the elective system we have today. For example, auto insurance is compulsory, yet nationally something like eight percent of drivers are uninsured. The number of citizens in Massachusetts without health insurance prior to the passage of mandatory coverage was slightly over six percent.

We hear a lot about the problem of access to services as a source of the crisis. Let me illustrate with another story. A company that we consult with performs case management and second opinions. A patient who had had neurosurgery to insert a brain stent suffered an event that appeared to require further neurosurgery. His family asked for a second opinion. My client assembled a team of leading specialists who identified two non-invasive alternatives: one was gamma-knife surgery, and one was use of a

linear-accelerator. Oh, one key fact I overlooked, the patient lives in Canada. My client tells me that there is only one gamma-knife available in all of Canada, and no linear accelerators. Unfortunately the gamma-knife belongs to the Princess Margaret Hospital in Toronto (where my daughter was born, coincidentally). The hospital ran out of money after buying the equipment so it isn't used. My client referred the patient to the United States where there are plenty of these devices, as well as linear accelerators. Why is this story interesting? Well, the international comparison illustrates that access is a major problem in systems other than the United States. More importantly, it illustrates another strength of the U.S. system—the flexibility that comes from the market and multiple players. The way financial incentives work in the United States, a gamma-knife wouldn't be purchased without some assurance that it would provide a return, and it certainly would not be allowed to stand idle. Our providers have a degree of certainty of financing that results from the private bargaining between participants in the system. Providers know that they have a reasonable expectation that they will have patient volume and financing if they decide to invest in a device like a gamma-knife. And anyone interested in discussing problems of access in Canada should call Gary Mooney, an FSA formerly from Toronto, who retired a couple of years ago and moved to Kingston, Ontario. Gary had to spend two years waiting for a physician practice that had a vacancy and was willing to accept him as a patient. The same thing happens with the government-funded sector in the United States. Those of you who work in Medicaid will know that states cap their budgets arbitrarily and simply stop paying claims when they reach the budgetary limits. This happened a couple of

¹ During the panel discussion, one of the speakers challenged this statement and said that, while historically true, this is no longer the case. It is my understanding that the laws that prevent private payment for publicly provided services are still in place, and that the Chaoulli decision found that patients had a right to services. A waiting line for services was found to be unconstitutional. The decision appears to have been interpreted in some places to allow patients to pay for their own care, but law in this area is very unclear.

years in a row in a state that had better remain anonymous, until election year when the legislature miraculously found \$1.2 billion in additional funding, and providers couldn't submit enough claims to use up the budget.

I would agree that there are problems in U.S. health care. But the system is resilient, flexible and allows for negotiation between parties who can make alternative decisions if they don't like an outcome. And the U.S. system is the largest driver of innovation in the world. Many of the wonderful advances in medical care that we see—huge improvements in survival rates for heart patients, for example—are the results of U.S. innovation. And rates for things like survival after diagnosis with different types of cancer are higher in the US. So, when it matters (i.e., when you are seriously ill) the U.S. system delivers the best care in the world.

There is one area of potential concern that may deserve the title crisis, though. But this area is not limited to the United States, rather, it is of international concern. That is the growing cost of entitlements, primarily (but not solely) to the senior population. Even a casual look at the demographics predicts a looming future problem—possibly even a crisis—because politicians have made promises that their budgets cannot deliver. One reason that the economics of health care, particularly health care for the elderly, are tricky is that they involve what are essentially personal services—often of highly-skilled (and therefore expensive) resources. Anyone with experience of consulting will know that an hourly rate for professional services (and what are clinical staff when they deal with patients, if not consultants?) can be several hundreds of dollars. Looked at from the perspective of hourly billing rates, it always mystifies me why people are surprised at

I would agree that there are problems in U.S. health care. But the system is resilient, flexible and allows for negotiation between parties who can make alternative decisions if they don't like an outcome. And the U.S. system is the largest driver of innovation in the world.

the cost of the health care system. Combine a growing senior population with non-scaleable personal services, and it is no wonder that health care costs are growing fast. Other industries have undergone cost and efficiency revolutions in my lifetime. Think of banking, or computers, or supermarkets. All of these are examples of industries in which the model used to be personal services, but which have shifted significantly to automation and self-service. We have yet to find a way to do this in health care. Other than drug therapy, the system is not scalable in its present form. So as demand grows, the cost rises proportionally. Until we solve this problem, this area is a looming crisis for all countries, not just the United States. But the solution will probably come from the U.S. system because we provide funding and incentives for innovation. In the private system, the ability of employers, employees, providers and insurers to bargain together allows us to come up with a compromise that, while no agent may be entirely happy, is at least acceptable to all.

So concerns and problems? Yes. Crisis? No. The word is over-used and should be struck from our vocabulary. Let's leave the system to get on and fix itself, because tinkering by regulators and politicians simply creates more problems. 🚫

Reflections on Health Care Financing and Benefits in the U.S.

Observations and Opinions

by Anna M. Rappaport

Introduction

I had the privilege of attending the National Academy of Social Insurance (NASI) annual conference “Getting to Universal Health Insurance Coverage” on Jan. 31-Feb. 1, 2008. The conference was multi-disciplinary and included leading academics, policy experts, and representatives of various stakeholder groups including employers, workers, insurers and health care providers.

As someone very concerned about retirement security, I have increasingly been aware that the retirement challenges of the nation are closely linked to the health care challenges. Americans can have a secure life and retirement only if we make the health care system work. Drew E. Altman stated in “The Real Health Reform Debate We Need to Have,” that health care costs are the single most important economic issue facing individuals and families. While there is a lot that is good to say about the system, there is also a lot that is not working. This article provides some ideas, opinions and observations heavily influenced by the discussion at the conference. I encourage those of you who want to learn more to look at the presentations.¹ I also hope to encourage a dialogue on this topic.

As we discuss health care, we can focus on financing or the delivery of care—we should think of these two things as being separate. Either or both can be controlled by a governmental unit. The conference was mostly about financing and insurance, and this article moves in the same direction. The views presented here are mine and not those of any organization.

Directions for Change

There are three **basic sets of “solutions”** as people think about moving closer to universal coverage or helping the uninsured:

- Maintain employer/government system with government playing key roles through Medicare and Medicaid, and fill in the gaps in various ways—advocated by the Democratic candidates for President. (Note that at the time of the Conference—1/31-2/1—there were still multiple candidates on both the Republican and Democratic sides)
- Have individuals choose health insurance, rely on the market, and give individuals tax credits to help them buy health insurance—advocated by Republicans recently.
- Single payer system (like Canada or the U.K.)—not on the table for discussion currently in the U.S. political debate— involves governmental control over the payment system, but not necessarily over health care delivery.

Note that satisfaction with Medicare is very high and some people do not believe it is a government solution. Overall satisfaction with Medicare is higher than with other health insurance available. Americans aged 55 and up often can not wait until they qualify for Medicare. A reviewer of the draft of this article suggested that Medicare for all would be a good solution. And while it would be hard to agree on such a solution, it would be relatively easy to implement.

As I thought about this, I became very distressed that single payer is not a primary option in the discussion. At several points during the conference, discussants made this point. Doug Andrews, an actuary from the University of Waterloo in Canada, made comments from the floor of the meeting focusing on the need to



Anna M. Rappaport, FSA, MAAA and past president of the SOA, is an independent consultant with her own firm, Anna Rappaport Consulting. She can be reached at anna@annarappaport.com.

¹ Presentations can be found at: http://www.nasi.org/publications2763/publications_list.htm?cat=Conference%20Proceedings%20%26%20Books.

consider single payer and its virtues. One of the conference sessions was a debate on this topic “Point-Counterpoint: Is a single payer plan the best option?”

My opinion is that the solution set that offers the best possibility for real control of costs is single payer and not the solutions currently advocated by candidates. However, it is probably the most difficult politically. Some actuaries from the United Kingdom and Canada see single payer as the obvious best choice. Putting band-aids on the current employer system will surely cost more. A market based approach with tax incentives will leave out the people who are poor risks, or it will include many regulations and subsidies, moving it away from a real free market system. The entire situation is very difficult.

These directions are based on the financing structure of the health care system. Another dimension of the problems is that our focus is largely on acute care and not preventive care. More focus on wellness or prevention can reduce the need for acute care a great deal. IBM has recently issued a white paper² focusing on the importance of wellness and offering ideas about how to improve in that regard. A focus on wellness and prevention could be joined to any of these three financing alternatives because it relates to what we cover rather than how insurance is organized.

What We Spend

By any measure, the United States spends far more for health care than any other country. It is not clear what value is derived from that in terms of better health, longer life, health status, etc. The United States generally does not measure up well on comparative health measures.

Why we spend more is very complex. Whether we can afford to spend even more is open to debate, but it seems likely that we can. However, the more we spend, the more it will

Putting band-aids on the current employer system will surely cost more. A market based approach with tax incentives will leave out the people who are poor risks, or it will include many regulations and subsidies, moving it away from a real free market system. The entire situation is very difficult.

affect the rest of the economy. Uwe Reinhardt, a very well known health economist from Princeton, gave the keynote. His presentation is available as a webcast.³ He demonstrated clearly how much more we spend as a percentage of GDP than any other country. His views of the state of health care are also well summarized in a letter to Governor Corzine of New Jersey that was distributed. He points to our inability to make a sensible compromise as a huge issue.⁴

I was very proud that Cori Uccello, senior health fellow of the American Academy of Actuaries presented a primer on insurance as part of the NASI conference. The concentration of claim dollars and the large claimant is a huge issue. The skewness of health care spending provides incentives for insurers to avoid those who are at risk for health claims. The issue was implied in the discussion by Cori, “Insurance Markets 101.” About 10 percent of the people usually account for 50 percent of the spending or more. Of the high cost claimants, many are chronically ill. In the individual market, where insurance companies can choose who they want to insure and are competing, there is a big advantage for insurers to avoid high cost people. In other markets where they can charge appropriately or pool some of the extra risk, there is no such disadvantage.

(continued on page 30)

² The IBM paper is titled “Living Well: Transforming America’s Health Care,” and can be found at http://www.businessofgovernment.org/main/publications/grant_reports/details/index.asp?GID=304

³ http://www.nasi.org/publications2763/publications_show.htm?doc_id=660901&name=Medicare

⁴ <https://www.princeton.edu/news/Reinhardtthehealthcarecommission/>



Society of Actuaries
Health 2008
SPRING MEETING

May 28–30, 2008
Hyatt Regency Century Plaza Hotel
Los Angeles, CA

Join us in Los Angeles where we expect hundreds of professionals with a vested interest in health care to converge. Health care is a hot button issue this election year and the Health 2008 Spring Meeting will offer you valuable insights into key health care topics of the day.

Look for sessions, forums and seminars on:

- health policy
- potential pandemic impacts
- the future of long-term care
- the politics of disability insurance
- global health insurance and national safety
- integrating medical and behavioral health care

Each session offers numerous opportunities for professional growth and, this year, when it comes to networking options, we've got you covered with luncheons, breaks, a wide variety of hot breakfasts (featuring hot topics), and a sure-to-be-packed reception.

Learn more and register today at :

<http://healthspringmeeting.soa.org>.

Actuaries
Risk is Opportunity.®

Letter from the Editor ... Are We Over Treated and Over Dosed by Our Health Care Industry?

by Gail M. Lawrence

There has been a lot of discussion about the high cost of health care, creating an impediment for the financing of universal health care. A lot of fingers get pointed at defensive medicine, the high cost of technology, exorbitant compensation for some physicians, high prices for drugs, excessive demand by health care consumers due to insurance and prescription drug advertising, and large bureaucratic overhead created in large part by the insurance industry.

Only rarely are questions raised regarding the medical necessity of treatment and the efficiency in delivering quality outcomes by our health care delivery system. That would mean second guessing the practices and judgments of our sometimes revered health care professionals. In reality, the best evidence-based practices are not always straight forward in an industry where medicine is sometimes as much art as science.

A couple of weeks ago, I was channel surfing and stumbled upon the CSPAN coverage of a book tour appearance by Shannon Brownlee, author of *Overtreated, Why Too Much Medicine Is Making Us Sicker and Poorer*. Brownlee, a widely published journalist, is a senior fellow at the New America Foundation in Washington, D.C. Her presentation was compelling as she explained the numerous sources and reasons for waste within the medical system.

I bought the book and I found it to be an eye-opening, captivating read. Brownlee tackles a girth of topics, punctuating her points with well-documented medical research, pertinent anecdotal stories and even a glimpse into the personalities and motivations of the various players within the industry.

I was a student of economics long before I became an actuary. Business is about maximizing profits and revenues and for the most part, medicine is big business. Exacerbating the situation is Roemer's law, a tenet of health economics that exhorts the notion of supply-induced demand

when it comes to medical care. In the medical field of dreams, if you build it, patients will come.

In *Overtreated*, Brownlee explores the extraordinary differences in geographic costs. For example, in 1996, a Medicare patient in Miami, Fla. cost \$8,414 per year as compared to \$3,341 in Minneapolis, Minn. In other areas of the country, some medical practices have distinct high-cost signatures. Research indicates that much of the extra spending is for minor procedures, as well as, imaging and diagnostic tests ordered at the discretion of the physician.

High spending does not necessarily translate into better health. Brownlee argues that research has shown patients are more likely to die in high spending environment. Higher death rates are caused by complications from medical procedures, a greater chance of medical errors, and lack of coordination among caregivers creating new medical issues.

One of the most interesting chapters dealt with "our broken hearts." Two million Americans have a heart catheterization procedure each year, of which 800,000 are in the midst of a heart attack. That leaves 1.2 million elective procedures where Brownlee writes, "at least 160,000 are inappropriate meaning they should not have been done, according to cardiologists' own rules for when to put in a stent or do an angioplasty....The latest research...suggests that the vast majority of elective cardiac procedures are no more effective at preventing heart attacks and death than medical management, which involves giving patients drugs and counseling."

Bypass surgery reduces the chances of dying for only the sickest of the sick. While some outcomes are successful, many patients have significant surgical side effects including death or cognitive deficiencies from being on a heart-lung machine. (The last time I saw my family doctor, I recall he complained about the large number of



Gail M. Lawrence, FSA, MAAA, is a consulting actuary. She can be reached at 515.224.4380 or at LawrenceConsulting@mchsi.com.

(continued on page 33)

Medicare Advantage—Future Benchmarks

by Daniel Bailey



Editor's note: Some of the material included in this article previously appeared in the author's presentation at the 2007 SOA Annual Meeting in Washington, D.C. last October.

Here in early January 2008, as membership in Medicare Advantage (MA) soars to a new all-time high, small and large organizations alike wait with apprehensive anticipation to learn more about the future funding of MA. Many companies that offer MA Part C would like to better understand what the future holds in the way of county-specific payment rates or “benchmarks” for 2009 and beyond. The 2009 benchmarks will be officially released on April 2, 2008. CMS will issue their annual 45-day notice in mid-February, at which time they provide a strong preliminary indication of where final payment rates will land. By the time this article is published, the 2009 rates will be known and the discussions concerning MA funding in 2010 and beyond should have progressed considerably. In the meantime, via national conference call on Dec. 17, 2007, CMS announced that it would propose to rebase the county-specific Medicare FFS costs. This would introduce more variability into the 2009 county-specific changes in margin than in 2008. There are other variables that affect the revenue level of MA plans, such as risk-adjustment, but in this article I will confine the

subject primarily to MA payment rates and MedPAC’s stated intent to make them equal to FFS Medicare costs in each county.

The logic behind county payment rates has become increasingly complicated and difficult for carriers to follow due to changes in the minimum funding level for each county brought on by legislation over the past decade. As a result of the Medicare Modernization Act (MMA) passed in December 2003, however, MA carriers have enjoyed significantly higher funding. Consequently, more private carriers have once again become involved, especially in Private Fee for Service (PFFS), a relatively new MA product enabled by the BBA in 1997. These carriers are the private-sector companies that participate in Medicare Advantage—elsewhere they are also referred to as insurers, MAOs (Medicare Advantage Organizations), or plans.

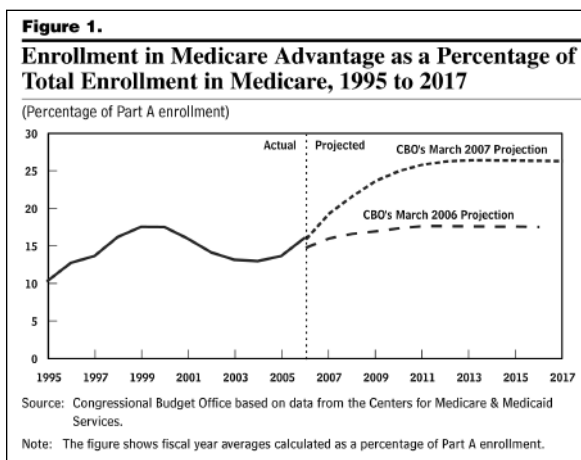
CMS provides annually updated MA benchmarks as well as the corresponding county-specific Medicare FFS (Fee for Service) costs for each of the 3,200+ counties of the United States, Puerto Rico, Guam, and the Virgin Islands. The difference between the two is typically referred to as “lift” or margin, and it too varies by county. In fact, margins have been substantial enough to encourage even some less experienced players without networks to enter the MA market. Now that many carriers have returned to the managed Medicare market and other new carriers have joined, they all want to know how future MA funding will affect their future.

About half of the MA membership growth over the past few years has been in PFFS. The other half has been mostly in HMO plans, which are still the long-standing primary benefit form of managed Medicare for reasons of efficient delivery. In some counties, the difference between the MA benchmark and the FFS cost of traditional A/B Medicare is negligible; in others, the benchmark may be substantially greater than the FFS cost. According to MedPAC, the congressional advisory council on the funding of Medicare, CMS pays MAOs 12 percent more to



Daniel Bailey, FSA, MAAA, IAA, is a consulting actuary with Reden & Anders in Rocky Hill, Conn. He can be reached at daniel.bailey@reden-anders.com.

deliver MA than CMS would pay if the same members had remained in traditional A/B FFS Medicare. This breaks down into 10 percent more for HMO and 19 percent for PFFS. That disparity has attracted attention because a health plan's "efficiency" helps to drive that difference. From 2000 to 2003, MA enrollment had declined by about one-fourth. Post-MMA, the enrollment has risen to a record level. The Congressional Budget Office has projected continued growth, but at a decreasing rate in years to come:



All else equal, the more margin that is embedded in the MA benchmark, the more benefits an MAO can offer to its members relative to traditional Medicare. Even without medical management savings, there are many counties in which an MAO can profitably offer an attractive zero premium PFFS plan with a richer package of benefits than traditional Medicare. It goes without saying that the administrative costs of an MAO per member are greater than those of the government. Even so, there is enough margin in some county rates to overcome this hurdle. And, for those MAOs that can deliver medical management savings, there is opportunity to profitably offer MA in many counties. Later in this article, we will return to the concept of "efficiency." For now, let's say a private plan is more efficient than Medicare, this means that it can manage the claims costs associated with the standard package of Medicare A/B benefits and all its administrative cost to a lower level than Medicare can. PFFS

is typically a less efficient delivery mechanism than HMO or PPO, and is closer to traditional indemnity than a PPO or HMO.

Over the past several years, MedPAC has expressed concern over the post-MMA level of MA funding. When their concern initially surfaced, it was difficult to conduct a fair comparison between the per member cost of MA vs. traditional Medicare. They could not draw a firm conclusion without actual member risk score data. In preparing their June 2007 report, however, MedPAC had obtained the necessary risk score data and completed their analysis. Their two-fold conclusion was clear—the government pays more per member under MA than Medicare, and this should be addressed by Congress. Industry proponents of MA are quick to point out that MA members generally get more benefits under MA than they would or do under traditional Medicare. That is, MA is like traditional Medicare plus a free or low-cost supplemental benefit plan. Many of the current MA members have limited incomes, moreover, and cannot otherwise afford to buy a supplemental benefit plan. Also, if an MA plan is not entirely free (in the form of a "zero premium" plan), then the MA member premium amount is usually low and attractive, relative to a Medicare Supplement premium. If not, the plan could not survive in the competitive MA market.

The fact that the 119 percent PFFS benchmark average is higher than the 110 percent HMO reflects the fact that the take-up rate for PFFS tends to be higher in those counties where there is higher margin. After all, these are the counties in which the additional benefits of MA seem richest in comparison with traditional Medicare. HMOs, on the other hand, are located where carriers have their networks, and that tends to be in urban more so than rural locations. For this reason, PFFS has come to serve Medicare beneficiaries in rural counties that previously had no MA plans offered. Many of the counties with large margins are rural "floor" counties, and their

(continued on page 36)

Timing's Everything: The Impact of Benefit Rush

by Joan C. Barrett

What is a benefit rush? Well, picture this. It is late on a beautiful autumn Friday afternoon. You have a few minutes to kill before your last meeting of the day, so you click on your company's Web site to check stock prices and there it is: The announcement that your company is going full-replacement Consumer Driven Health (CDH). What is your first reaction?

- Wow, that is great. My company will save money.
- I will use this as an opportunity to become a better consumer.
- Gee, I better call my doctor and get an appointment for that procedure I have been putting off.

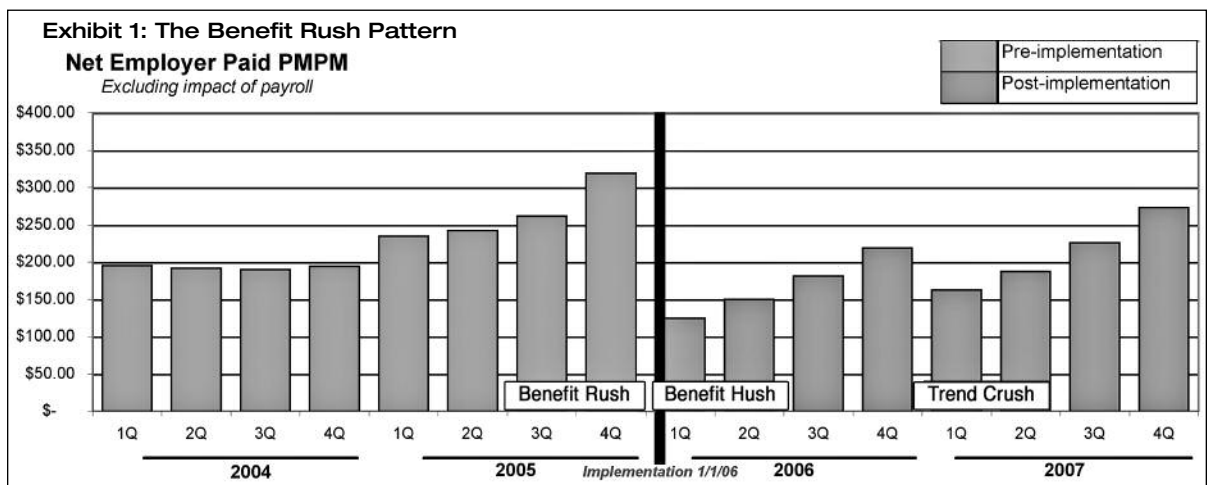
When this happened to me, my choice was easy: c. Like myself, most consumers who "benefit rush," receive services where the timing is optional, like some knee and back surgeries.

A benefit rush may occur anytime there is a noticeable change in the benefit package. Even simple things like a change in carrier may trigger a benefit rush. The financial impact of the rush depends on the magnitude of the change and the timing of the announcements. For large groups, announcements come early and a change such as a full-replacement CDH are considered major, so an increase in annual claims costs in the three percent to five percent range is common.

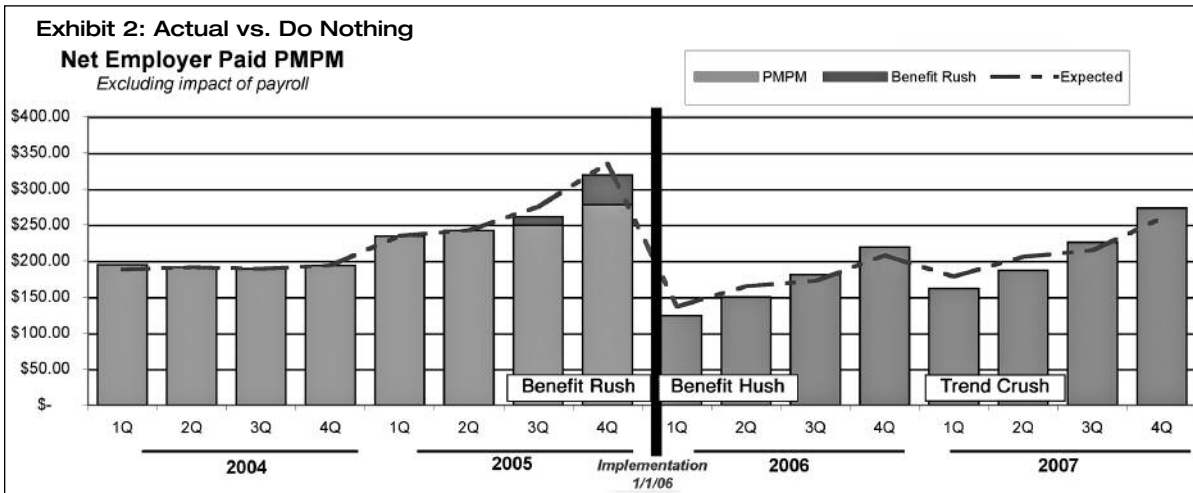
On the other hand, small groups tend to have shorter announcement periods and less rich plans, so the impact on a customer by customer basis is less pronounced.

The benefit rush not only impacts the year before a change is implemented, but also has an impact for two years following implementation as illustrated in Exhibit 1 below. In the year following implementation there is a "benefit hush." Claims are lower than they would be on a "steady state" basis in part because some of the services that would have been incurred in that time period were incurred during the rush. In addition, there is often a wait and see attitude as consumers adapt to the new plan. In the second year, there is a "trend crush," as claims go back to a more normal level and consumers become more used to the new plan design. The trend, however, is higher than it would have been because it is coming off a lower base.

In a similar vein, there is a benefit delay pattern that emerges when a customer adds a major life style benefit, such as LASIK eye surgery, or increases a benefit limit on a costly service such as hearing aids. A benefit delay follows a rush-hush-rush-hush pattern in the first few months following implementation. The first rush occurs in January when consumers who are very in tune with the benefit package rush out to take advantage of the upgrade. There is a short lull, then the second rush occurs three to six months later, after word of mouth among



Joan C. Barrett, FSA, MAAA, is senior actuary at UnitedHealth Group in Hartford, Conn. She can be reached at Joan_C_Barrett@uhc.com.



the employees and provider-induced demand kicks in. After the second rush, the pattern tends to level out.

The Impact: Large, Self-Insured Customers

If a self-insured customer makes a change to its program big enough to precipitate a benefit rush, then chances are the customer will sooner or later ask the question “How much did I save?”

To maintain credibility, consultants, underwriters, actuaries and others who advise large clients may find it prudent to walk the customer through the benefit rush cycle step by step, starting with an initial projection and true-ups as experience becomes available as illustrated in Exhibit 2 (above).

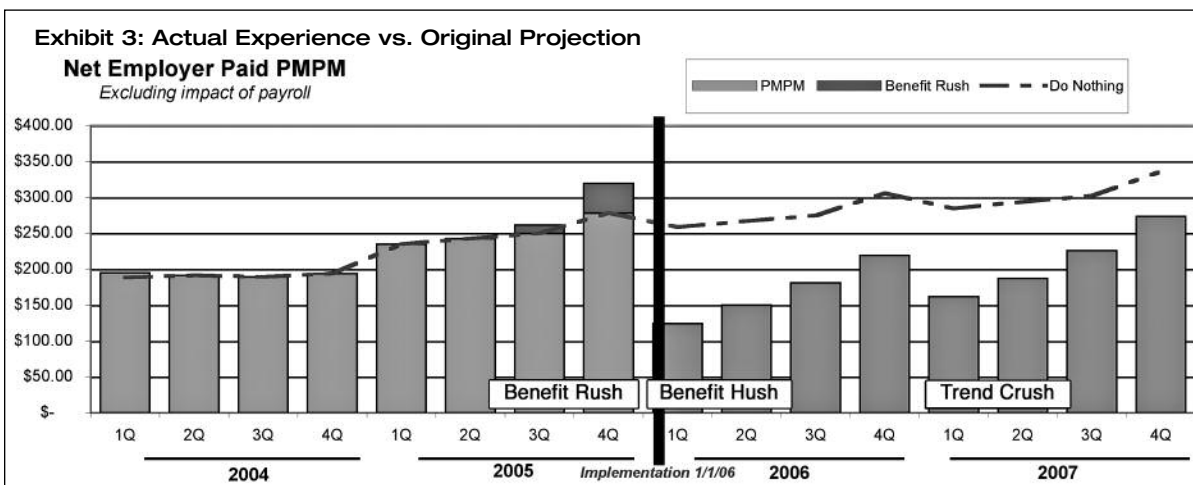
The calculation of a savings amount is always somewhat tricky because of the inter-related variables: trends, change in provider contracts, etc. Typically, savings are shown by a comparison to a

“do-nothing” scenario as shown in Exhibit 3 below, which simply compares the customer’s actual trend to the projected experience based on pricing trends or some other reasonable trend assumption. This approach is simple and all the key variables are implicitly accounted for. The customer may object to it, however, because at the end of the day, the do-nothing trend is still hypothetical, no matter how reasonable the assumption.

A more concrete way to demonstrate savings is an explanation of trend exhibit like the one shown in Exhibit 4 (see page 39), which breaks down the savings into the component parts. This method has the advantage that the bottom line is not hypothetical: the experience is the experience. Needless to say, the method for deriving the components is somewhat subjective.

Historically, self-insured business has been relatively “risk-free” from a carrier stand-point,

(continued on page 39)



Navigating New Horizons: An Interview with Cori Uccello

by Sarah Lawrence



Cori Uccello had a lot to consider when choosing her career path. A woman with multiple interests and talents, one of her biggest challenges was picking just one way to go. In the end, her curiosity and hard work have paid off as she finds herself in a career that allows her to explore more than one of her passions. As senior health fellow for the American Academy of Actuaries in Washington D.C., Uccello is able to combine her experience as an actuary with a genuine love of research, public policy and working with people.

Background

Uccello was born in Hartford, Connecticut—a city with deep roots in the insurance industry where becoming an actuary is not much of a stretch for a local who loves numbers.

As a young student, Uccello was drawn to subjects that tested her logic and reasoning skills, such as science and math. It was the suggestion of a teacher that she consider pursuing an actuarial career.

“I had a really great algebra teacher and I think she was actually the first one to mention the profession to me,” Uccello said. “So even going to

high school I had that in the back of my head, even though I wasn’t 100 percent positive about what I wanted to do.”

After high school Uccello attended Boston College and earned a bachelor’s degree in mathematics and biology. While attending classes she took the first of her actuarial exams and decided that actuarial science was the career path she would take.

“I’m not really sure why I decided to become an actuary, but I think it was almost by default,” she said. “I was a math major and I passed an exam, so that’s what I did, but I was never absolutely certain that it was what I wanted to do.”

Her first job out of college was as an actuarial assistant for John Hancock in Boston. For seven years she worked there and gained experience in various departments.

At the same time, Uccello continued to take her actuarial exams and stumbled across a new interest in the process. “One of the exams covered some health policy topics and in the process of studying for the exam I came to realize that public policy was more what I wanted to do,” she said. “After I finished that exam, it wasn’t long after that I earned my FSA and decided to go back to graduate school.”

Uccello moved to Washington D.C. and pursued a master’s degree in public policy from Georgetown University, a move which led to a paid internship with the health and human resources division of the Congressional Budget Office (CBO). “I very much enjoyed my experience there,” she said. “It was during Clinton health reform and that I was able to play even a small role in some of the analysis that CBO did on the Clinton health reform package was very exciting and rewarding.”

Upon receiving her degree from Georgetown in 1994, Uccello took a job as a research associate in The Urban Institute’s income and benefits policy center. In that position she worked on several health reform issues and eventually moved on to focus her research in retirement security areas such as retiree health insurance and pensions.

The Academy

In 2001 Uccello took her current position as senior health fellow for the American Academy of Actuaries, an organization that serves the public on behalf of the U.S. actuarial profession. The Academy unites actuaries from all practice areas and acts as the voice of the profession on public policy and professionalism issues.

As senior health fellow, Uccello is the profession's chief health policy liaison. In this role she provides information to policy makers as they are putting together health care related proposals. Working with the many health-related volunteer committees, she helps put together issue briefs and monographs that help her interact with congressional staffers and the media.

Uccello said one of the things she likes best about her job is the variety it has to offer in day-to-day activities. "There's almost no such thing as a typical month for me," she said. "What I do really depends on what issues Congress is talking about, what issues the media is covering and also what kinds of things the Academy is trying to pursue and highlight."

Every fall, the Academy's Health Practice Council meets for a planning session to map out what issues they will address over the next year. "It's partly thinking ahead to what kind of issues are going to be prominent and decide how we can approach them from an actuarial perspective," she said. "In D.C. alone there are scores of organizations whose main purpose is to do health related policy work, so the Academy has to think about how best to use its resources to provide information to policymakers as they're putting together proposals."

This year the country will pick a new president and Uccello said the outcome of that race will have a large effect on what the Academy focuses on for the rest of this year and in 2009.

"In an election year like this, we're clearly more driven by what the candidates are speaking about," she said. "We need to not only look at the general approaches that different candidates are taking to health reform and health related issues, but also to prepare ourselves to be ready once the next president takes office. We also need to highlight any issues that we don't think are

receiving enough attention from the candidates and the media alike."

With health care issues near the top of most of the presidential candidates' agendas, Uccello said there could be a lot of change ahead.

"No matter who the next president is, health reform is likely going to be high on that president's agenda," she said. "Also, even though some health reform issues have been publicly on the back burner over the past couple of years, it doesn't mean policymakers aren't still working behind the scenes to shore up their different proposals and get more information on the implications of different approaches."

Uccello said this means that while there may not be much health care related legislation passed or acted upon this year, members of Congress are certainly gearing up for that possibility in the future.

As for the Academy, Uccello said its role is to provide expert policy advice that is nonpartisan and objective. "The Academy does not typically take positions on any particular piece of legislation," she said. "Instead, we focus more on highlighting the implications of general approaches and offering ways to address potential adverse consequences."

I think the next couple of years are going to be a very exciting time not only for me, but also for the Academy and the actuarial profession as a whole."

An example that illustrates the impact of the Academy relates to the risk sharing provisions in the new Medicare prescription drug law. Before the law was finalized, the House and Senate versions of the bill differed in their risk sharing provisions. Uccello helped the Academy draft a letter to Congress commenting on the strengths and weaknesses of each approach. "We pointed out some potentially negative implications of one of the approaches and the final version of the legislation and the law that was eventually passed reflected our input," she said.

(continued on page 22)

Uccello said taking that kind of seat at the policy table on behalf of actuaries nationwide is what makes her job so rewarding. "I've been here for almost seven years now and I still love it," she said. "It's exciting, especially in those times when health reform issues are at the forefront of the policy agenda. I think the next couple of years are going to be a very exciting time not only for me, but also for the Academy and the actuarial profession as a whole."

Get Involved

With so much going on in the world of health care policy, Uccello said she wouldn't be able to do her job effectively without a lot of help from volunteer members. "All of the volunteers are so generous with their time and are always happy to help answer my questions and work on various committees," she said. "They put together issue briefs on very important topics that are necessary for lawmakers to have a better understanding of different potential policies."

Uccello said the Academy is always happy to take on more volunteers to work in health related

issues. "Volunteering is pretty much how the Academy operates," she said. "The Academy is not only trying to help different actuaries become part of the public policy process, but it's also helping to inform our member actuaries on the different policy issues that arise. So it goes both ways in a sense."

For those who are too busy to volunteer but would like to follow the Academy's activities, Uccello suggested a visit to www.actuary.org. "The Academy has an alert system that sends out an email to member subscribers whenever there are major legislative, regulatory, or judicial developments affecting actuaries," she said. "Each alert typically includes a brief summary as well as links to find more information."

In addition, visitors to the Web site can learn more about the Academy's other roles, such as creating practice notes that can help actuaries as they do their jobs. "The Academy as a whole is very much here to help actuaries," she said. "I think what we do here is really important and has the extra benefit of being really interesting and exciting." ❏

2008 DI & LTC Insurers' Forum

Don't miss the premier DI & LTC conference in North America! Top-notch speakers, cutting-edge workshops and excellent networking opportunities make the Forum the must-attend event of the year. Come learn from the best! Topics include:

- LTC product evolution
- Success beyond the medical market
- Improving underwriting service
- Group LTC: is it a winner?
- Stochastic modeling and principles-based reserves
- Using technology to improve results
- And much more!

Who Should Attend?

Executives and professionals responsible for and interested in individual DI & LTC products, sales, distribution, claims, underwriting and administration.

Critical Illness Conference

The Critical Illness Insurance Conference takes place September 22-24 at the same site. Attend half a day on September 24 for just \$275 (LIMRA, LOMA and SOA Members), \$375 nonmembers!

Register by August 28, 2008 to receive the best conference and hotel rates! Visit www.soa.org for complete details.



September 24-26, 2008

Planet Hollywood Resort and Casino
Las Vegas, Nevada

Sponsored by:



SOA Releases New Long-Term Health Care Cost Trends Resource Model

by Steven Siegel

What will the world look like 30 years from now in 2038? How about regular commuters to the moon celebrating the launch of the first lunar Starbucks with Venti Mocha Frappuccinos at the special grand opening price of \$52.95 (just a \$1.00 more than the regular price of \$51.95 on Earth)? Or, how about the ultimate in Bluetooth technology, where cell phones are actually implanted permanently in eardrums? Talk about hearing ringing in your ears! And what new, wondrous technology for critically ill patients will impact health care costs?

Although my first two predictions for 2038 are clearly tongue-in-cheek, the last question is part of a real exercise in projection that actuaries who produce FAS 106 and GASB 45 valuations go through regularly. To help these actuaries, the SOA's Pension and Health Sections recently released a new resource model for projecting health care trends through the year 2099. The model and accompanying documentation can be found on the SOA Web site at: <http://www.soa.org/research/health/research-hlthcare-trends.aspx>

The original idea for the project came from Kevin Binder, who also served as chair of the group overseeing development of the model. Binder, an actuary with Bolton Partners, had read a 2004 article in *Business Week* on possible increased scrutiny by the U.S. Securities and Exchange Commission (SEC) into assumptions made in connection with accounting for post-retirement benefits. The SEC was concerned that some assumptions might have been manipulated to meet companies' profits and balance sheet figures. Included among the assumptions that the SEC flagged was the level of health care cost inflation in relation to retirees' medical benefits.

The SEC's concern underscored the lack of actuarial research concerning long-term health care trends. Binder suggested that having a resource model that was both transparent in methodology and clearly documented its data sources and economic assumptions would be a valuable tool for selecting long-term health care trend assumptions. Furthermore, the model could

be used to help explain, document, and justify the assumptions to interested parties. With this objective in mind, the Pension Section's Research Team set out to hire a researcher to develop such a model that could easily be used by knowledgeable practitioners.

Subsequently, a request for proposals was issued and proposals from several leading experts were received. From those proposals, Professor Thomas Getzen of Temple University was selected to create the model. Prof. Getzen, a well-known health care economist, is also Executive Director of the International Health Economics Association (iHEA). His textbook *Health Economics and Financing* (Wiley; 3rd ed.) is on the SOA exams syllabus as part of the Health Systems Overview FSA module.

To oversee the research, a group of prominent actuarial practitioners from both the Pension and Health Sections was recruited (with Binder chairing): John Cookson, Marilyn Oliver, Adam Reese, Russell Weatherholtz, and Keith Williams. The group was excited to forge a partnership with a researcher from outside the profession and felt that the multidisciplinary perspective Getzen provided would result in enhanced interest of the work by a wide range of health care professionals.

The results of the research include an Excel model that projects per-person expenditures and growth rates through 2099 using a set of equations and assumptions developed by Getzen with assistance from the project oversight group. The model includes baseline assumptions as well as flexibility for user-inputted alternative assumptions. The data sources underlying the model assumptions are specified in the accompanying technical documentation providing transparency and support for the ultimate results.

To further illuminate the model, the project oversight group authored a document that describes practical issues that might be



Steven C. Siegel, ASA, MAAA, is a staff research actuary with the Society of Actuaries in Schaumburg, Ill. He can be reached at ssiegel@soa.org.

(continued on page 25)

Soundbites from the American Academy of Actuaries Health Practice Council

by Heather Jerbi

What's New

In March, the Health Practice Council, as part of its 2008 election strategy, released a series of brief summaries of some of the relevant issues being discussed as part of the national dialogue on health care reform. The purpose of these papers is three-fold: to provide basic information for policymakers and the media, address issues policymakers need to consider as they engage in discussions on any of these topics, and to remind policymakers that the actuarial profession is an objective resource that is aware of the issues and ready to help with solutions. The series includes information on the following: rising costs of health care, medical reinsurance, medical insurance pools, Medicare and consumer driven health plans.

Also in March, the Medicare Steering Committee updated and published its annual issue brief, *Medicare's Financial Condition: Beyond Actuarial Balance*, which provides a brief analysis of the 2008 Medicare Trustees' Report. And a subgroup of the Medicare Steering Committee released a practice note, *Actuarial Equivalence for Prescription Drug Plans and Medicare Advantage Prescriptions Drug Plans under the Medicare Drug Program*. The practice note provides guidance to actuaries certifying the actuarial equivalence of a PDP or MA-PD, pursuant to CMS guidelines and requirements. The practice note can be found online at: http://www.actuary.org/pdf/practnotes/health_partd_mar08.pdf.

The Academy's Health Practice Financial Reporting Committee submitted a comment letter on the NAIC's exposed actuarial opinion section of the Health Annual Statement Instructions on Feb. 19, 2008. The comment letter highlights some concerns that the committee has, as the NAIC moves forward in creating a more consistent Health Actuarial Opinion. The comment letter can be found online at: http://www.actuary.org/pdf/health/opinion_feb08.pdf.

The exposure draft can be found online at the NAIC's Web site: http://www.naic.org/documents/committees_lhatf_ahwg_haosg0114.pdf.

In February, the Disease Management Work Group released its practice note, which provides insight into current practice and includes an appendix on relevant Actuarial Standards of Practice. The practice note can be found online at: http://www.actuary.org/pdf/practnotes/health_dm07.pdf.

Having received a charge from the NAIC to create a health trend test, a joint work group of the Health Practice Financial Reporting Committee and the Committee on State Health Issues is in the process of being formed. It is anticipated that the new group will begin work by the start of the second quarter of 2008.

In December, an op-ed by Academy Senior Health Fellow Cori Uccello appeared in the Union Leader urging the presidential candidates to start paying attention to Medicare's financial difficulties. "Candidates need to break the silence, acknowledge the problem, and begin a public dialogue that addresses the tradeoffs necessary to ensure Medicare's future," writes Uccello. The newspaper is the largest in New Hampshire, which held the first presidential primary of 2008 in January. The op-ed can be found online at: <http://www.unionleader.com/article.aspx?headline=Cori+E.+Uccello%3a+Presidential+candidates+are+failing+to+address+Medicare%27s+looming+insolvency&articleId=43735a21-fbdb-46fd-ac84-eed6030be4d9>

Ongoing Activities

The Academy's Health Practice Council has many ongoing activities. Below is a snapshot of some current projects.

Consumer Driven Health Plans Emerging Data Subgroup (David Tuomala, Chairperson)— This work group is developing a paper analyzing emerging CDHP data.

Health Practice Financial Reporting Committee (Darrell Knapp, Chairperson)—The committee continues to work on updating several practice notes (Small Group Certification, Large Group Medical, and General Considerations). They are also finalizing their practice note on Medicare Part D accounting.

Individual Medical Market Task Force (Mike Abroe, Chairperson)—This task force continues to work on a monograph related to how the current individual market operates. Issues examined in the paper relate to affordability and barriers in the individual medical insurance market. The paper is expected to be published in the second quarter of 2008.

Long-Term Care Principles-Based Work Group (Bob Yee, Chairperson)—This work group is beginning the modeling phase of their work and will be providing an update to the NAIC in 2008.

Uninsured Work Group (Cathy Murphy-Barron, Chairperson)—The work group is expected to release a paper on issues related to the fundamental principles of insurance and the characteristics of health coverage by April 2008. The work group has also begun work

on an issue brief that will address the drivers of health care costs.

Health Care Quality Work Group (Michael Thompson, Chairperson)—This work group is developing an issue brief that will examine health care quality today and the impact of comparative effectiveness research on the advancement of health care technologies and quality treatments.

NAIC Projects

The Committees on State Health Issues and Health Practice Financial Reporting continue to monitor issues, including LTC, health insurance issues, Medicare Part D, principles-based methodologies, Medigap modernization, etc.

Upcoming Activities and Publications

Several documents are slated for publication in 2008, including papers on individual market issues, health care coverage, drivers of health care costs, and health care quality and comparative effectiveness.

If you want to participate in any of these activities or you want more information about the work of the Academy's Health Practice Council, contact Heather Jerbi at Jerbi@actuary.org. 📧

SOA RELEASES NEW LONG-TERM HEALTH ... | FROM PAGE 23

encountered by actuaries using the model. Issues discussed include the relationship of short-term trend rates inputted by users to long-term projected rates, characteristics of the prescribed substantive plan to be valued, and special cases that may require model adjustment. As well, examples of sample report language are provided.

To keep current with the latest health care data, the model will be updated annually. The timing of the updates will be dependent upon availability of the latest health care cost estimates from CMS and other sources.

In keeping with the original objective of the model's creation, it is important to note that it is

intended to serve as a resource tool, rather than in any way representing an official statement on the preference of the methodology in the model over any other ones that are in use.

The Pension Section and Health Section Councils would like to express their thanks to the project oversight group for its dedication and valuable assistance in completing this effort. They would also welcome any feedback you have on the models and thoughts for future related projects. Please e-mail me at ssiegel@soa.org—your comments are greatly appreciated! 📧

event (which suggests that there's a fair amount of money to be made in turning a local Blue Cross organization into the nation's largest health plan). Robinson is the new editor-in-chief of *Health Affairs*, having taken over the job a few weeks earlier from founding editor John Iglehart. Schaeffer describes Robinson as one of the few health services researchers who really understands the health care business, having "talked his way" into an internship at WellPoint while taking a break from his day job as a professor and departmental chairman at UC-Berkeley.

Robinson notes that there are two breathtaking features of America's health care system. The first is the dizzying pace of clinical innovation, leading to cures and treatments which, just a few years ago, we could scarcely have expected to achieve (or even imagined, in some cases). The second is the astronomical cost of the system, not just in terms of new technology but in terms of almost every aspect of how care is delivered and financed in this country. Robinson then introduces the first three speakers: National Institutes of Health (NIH) Director Elias Zerhouni, Aetna CEO Ronald Williams, and Merck CEO Richard Clark. The idea is to have one panelist (Zerhouni) representing public-sector researchers, another (Williams) representing private-sector payers, and a third (Clark) representing private-sector "innovators."

Once upon a time, we might have expected the director of the NIH to focus on the first feature of the health care system that Robinson talked about (clinical innovation) and the CEO of Aetna to focus on the second feature (high costs). But the two issues are inseparable, as all three speakers acknowledge. Zerhouni offers two compelling examples of this:

- The cost of treating chronic conditions is eating up an ever-larger share of the health care pie. In order to control this cost, we need to be able to detect the biochemical changes that occur 20 or 30 years before a chronic disease starts to present diagnosable symptoms. This is a huge scientific challenge, but it's one where a breakthrough could lead to dramatically lower costs in the long run.

- In order for new health care technology to become more affordable, we need to prevent our reimbursement systems from getting stuck in the earliest phase of the innovation cycle. Like any innovative technology, a new health care product (such as a drug or diagnostic device) starts out with a very high unit cost. As the product becomes more widely used, the unit cost declines, often precipitously, since the huge expenses associated with research and development can now be spread over a larger base. But in the health care arena, reimbursements are often set in the early (high unit-cost) phase of the cycle, and remain frozen at that level even if unit costs plummet.

Next on the agenda is Mark McClellan. In the next 20 minutes I'll realize that—just as I'd feared—there's barely enough room on my plate for the informational feast that today's speakers have to offer. Dr. McClellan was a member of the President's Council of Economic Advisers, the commissioner of the Food and Drug Administration, and the administrator of the Centers for Medicare and Medicaid Services, all by the age of 40. In a room where almost everybody has at least one graduate degree, Mark has three (MPA from Harvard, PhD in economics from MIT, and MD from both). A guy with his vast experience and expertise could easily fill a whole day with insightful analysis and cogent arguments, but he's been allotted less than half an hour. McClellan compensates for this by talking very fast. I manage to squeeze most of his key points into a few pages of furiously scribbled notes, hoping after it's over that my right hand will recover in time for the next presentation—and thinking that perhaps the most apt metaphor for today is not a sumptuous banquet but instead an attempt to get a sip of water from a fire hose.

Having left the federal government, McClellan is now affiliated with both the American Enterprise Institute and the Brookings Institution, which means he has the ideological spectrum pretty well covered as far as think tanks go. He starts out by noting that, at the present time, we don't know the relative efficacy of most of the care that's being delivered today. And the

knowledge gap is growing: over the last few years, there's been a huge increase in the number of health care products and procedures that are available, without anything close to a commensurate increase in the number of cost effectiveness studies being performed to evaluate all these new treatments. The problem is compounded by the increasing personalization of medicine, which means that we can't just focus on the average patient in performing our evaluations. (As Dr. Zerhouni noted earlier, any given treatment—even if it's generally considered safe and effective—will have a noticeably beneficial effect on only a fairly small percentage of the patients for which it's indicated. For most patients, the treatment will have little or no therapeutic effect, and for another small percentage of the patients, it actually will be harmful.) The solution, according to McClellan, is to develop a “learning” health care system in which the collection and evaluation of outcomes data (not just claims data) is integrated into the delivery of health care. Among other effects, this could facilitate the development of “value-based” insurance, in which reimbursement policies take into account not just the cost of a treatment but its likely effect as well.

The last session before we break for lunch is a panel discussion on the alignment of provider incentives with health care quality goals. The moderator is Risa Lavizzo-Mourey, president of the Robert Wood Johnson Foundation, and the panel includes Donald Berwick, president of the Institute for Healthcare Improvement; David Eddy, co-inventor of the Archimedes health care simulation model; and George Halvorson, CEO of Kaiser Permanente (which makes him my boss's boss's ... boss's boss). The underlying principle of the discussion is that, in going about their jobs, most people—including doctors and others health care providers—will do what they're paid to do, but won't spend much time or effort performing tasks for which they're not rewarded. Thus if we want to have more high quality, cost-effective care, we have to arrange the financial incentives so that the doctors who provide it will earn more, not less, than the ones who (understandably, given the current system) don't bother to do so.



The lunch program features a talk by Cheryl Scott, chief operating officer of the Bill and Melinda Gates Foundation. Unlike most of the conference attendees, Scott's professional focus is more on health care in developing countries than on the U.S. health care system. Still, she controls more money than most of us will ever see in our lifetimes, so it's always worthwhile to hear what's on her mind.

The lunch program concludes with the presentation of an award to John Wennberg for being the “most influential health services researcher over the past 25 years.” As a professor and departmental chairman at the Dartmouth Medical School, Dr. Wennberg has led the way in the development and application of small area analysis to study geographical variations in health care utilization and resource allocation. The results of his and his colleagues' research can be found in *The Dartmouth Atlas of Health Care*, another bit of “required reading” among health care analysts.

The afternoon sessions include two roundtable discussions. The first one, a “CEO Roundtable” moderated by Susan Dentzer of PBS's “The News Hour,” is enlivened by the inclusion of Linda Golodner, president of the National Consumers League, and Andrew Stern, president of the Service Employees International Union. Other participants include Bill Novelli, CEO of AARP, and Gail Wilensky, a prominent

(continued on page 28)

health economist who worked in the first Bush administration. And, of course, there are the corporate CEOs, although they're in the minority here: Jack Bovender (HCA), Angela Braly

The solution is to develop a “learning” health care system in which the collection and evaluation of outcomes data is integrated into the delivery of health care.

(WellPoint), and Joseph Hogan (GE Healthcare). The conversation turns out to be more about politics than about business or management. Hogan offers one of the more intriguing thoughts to come out of the discussion: while everyone wants to reduce emergency room utilization through increased access to primary care, if we were actually to achieve that, our current primary care system would be completely overwhelmed. For me, though, the highlight of the discussion is Braly's observation that there's an “actuarial law of gravity” (adverse selection) which can be neither defied nor ignored. It's nice to know that the higher-ups have an appropriate degree of respect for our profession and its “laws.”

The second discussion, a “Presidential Candidates' Health Policy Adviser Roundtable,” is moderated by Drew Altman, president of the Kaiser Family Foundation. This would have been an interesting session to report on were it not for the fact that most of the candidates have dropped out of the race by now. Still, it gives me another opportunity to hear Len Nichols, director of health policy at the New America Foundation and one of the keynote speakers for this year's Society of Actuaries Health Spring Meeting. I come out of the session very pleased with our choice!

The last two speakers of the day are Uwe Reinhardt, of Princeton University and the Commonwealth Fund, and Mark Smith, president of the California HealthCare Foundation. Prof. Reinhardt might be considered the dean of health services researchers in the U.S. (or at least at this gathering), having taught economics at Princeton since 1968, and being the only member of the Health Affairs editorial board to have served in

that capacity since the journal's founding. He delivers his talk on the ethical and philosophical issues surrounding health care reform with his characteristic wit and charm.

Dr. Smith is also witty, but his wit has more of a bite to it. He starts off by saying that while all the other speakers have expressed how glad they are to be here today, he's not happy at all, given that his presentation is the last one of the day and thus will be delivered after every interesting remark that possibly could be made about the health care system has already been made. Nonetheless, he manages to give us a quite interesting and entertaining analysis of what ails the health care delivery system in this country. As Smith sees it, there's no point in reforming the health care financing system if we don't first reform the delivery process to reduce costs and increase customer satisfaction. Two keys to accomplishing this are (a) having much more self-service and self-care than we currently do, and (b) matching caregiving tasks with providers who have the appropriate level of skill and training (for example, not requiring a doctor to do a task that a registered nurse can perform, and not requiring a nurse to do a job that can be handled by a health aide).

For me—looking at it from an actuarial perspective—the key takeaway from the Health Policy Summit was contained in a comment made during Dr. McClellan's presentation. He noted that, before all the reforms that all the speakers have been talking about can be accomplished, “a lot of challenging statistical issues” need to be tackled. I'm interpreting this as an open invitation for the actuarial profession to jump in and take a stab at it. 📌

Editor's note: Both a transcript and a video of the Health Affairs 2007 Health Policy Summit is available at: http://www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=2424

Apart from the effects on the health and vitality of individuals and the population, the health care system has spill-over effects throughout the economy: medical bills are overwhelmingly the most common reason for personal bankruptcy; hospitals, particularly emergency departments, provide a safety net at considerable cost; and employer health care costs affect global competitiveness.

The popular view about the relative strengths of the U.S. health care system is that it offers individuals more choice, with the implication that greater choice equates with higher quality and lower cost due to competitive pressures. However, Americans may have less choice than is popularly believed. Businesses often sharply limit the number of health plans offered to employees and managed care systems often restrict availability of physicians. In any event, the evidence does not support the assumption that consumer choice significantly increases quality or reduces costs.

These, and many other deficiencies, are well understood. However, the political community has not been able to agree on a solution, despite a proliferation of reform proposals during an election season. The ideological sticking point remains whether public or private solutions should be primary. The serious, foundational deficiencies I have thus far discussed are part and parcel of the private system. But despite the evidence, market theories say that we could fix the problem. The usual proposals are health savings accounts (HSAs), “consumer driven” systems, and high deductibility policies. I am not implacably opposed to all these proposals, but to think that they are sufficiently scalable to even make a dent in the problems I mention above is utterly unsupported.

Problem #1: HSAs, whatever their ostensible goals, are another **tax break for the wealthy**, who have already been showered with tax breaks. Paying medical expenses with pre-tax income is worth a lot to high-income individuals who face a marginal income tax rate of 35 percent, but little or nothing to lower-income Americans who face a marginal tax rate of 10 percent or less, and lack the ability to place the maximum allowed amount in their savings accounts.

Problem #2: HSAs tend to **undermine employment-based health care**, because they encourage adverse selection: health savings accounts are attractive to healthier individuals, who will be tempted to opt out of company plans, leaving less healthy individuals behind.

Problem #3: Evidence already demonstrates that **people don't, in fact, make wise decisions when paying for medical care out of pocket**. A classic study by the Rand Corporation found that when people pay medical expenses themselves rather than relying on insurance, they do cut back on their consumption of health care—but they cut back on valuable as well as questionable medical procedures, showing no ability to set sensible priorities.

Problem #4: The essential issue has been misdiagnosed. Conservatives believe that Americans have too much health insurance. The *2004 Economic Report of the President* condemned the fact that insurance currently pays for “many events that have little uncertainty, such as routine dental care, annual medical exams, and vaccinations,” and for “relatively low-expense items, such as an office visit to the doctor for a sore throat.” The implication is that health costs are too high because people who don't pay their own medical bills consume too much routine dental care and are too ready to visit the doctor about a sore throat. And that argument is all wrong. **Excessive consumption of routine care, or small-expense items, can't be a major source of health care inefficiency, because such items don't account for a major share of medical costs.** A small number of people requiring very expensive medical care (disproportionately in the last months of their lives) account for 80 percent of medical expenditures.

So many questions loom large: Is the U.S. health care system in crisis? Do we really have the best health care system in the world? Are the well-off willing to give up some small benefits to help the most disadvantaged among us? Can the political parties come together to do what every other civilized country in the world has long accomplished—universal access to health care for the common good? ❏

Different observers have different viewpoints about how effective the current individual insurance market is. My view is that private insurance will not work satisfactorily if the sick can't get insurance, and this has been the case up until now.

Community rating was intended to solve the problem, but it became much less common in the United States years ago. Today, some states require community rating for small groups and some for individuals. If a company tries community rating in a state that does not require it, healthy people will look for a lower price so that the company that uses community rating will get an unfair share of sick people, and its costs will spiral. Risk adjustment is an approach to dealing with this problem. My opinion is that any market based solution that will function satisfactorily for those in poor health would need to include some form of risk adjustment and access for all.

Employer Coverage—a Success or Failure?

Within the last few weeks, I have heard discussion that takes opposing positions on the role of the employer coverage—both success and failure. The NASI conference included a panel that discussed the role of the employer. The provision of health benefits by large employers was demonstrated to be quite stable. The panelists provided interesting data on the employer's approach to coverage.

Sherry Glied from the Department of Health Policy and Management at Columbia presented data indicating that employer coverage has been very stable except among small firms—those with three to nine employees—where there is a marked decline. Note that there is also some shift to employment in very small firms and there is growth in the number of contingent workers without coverage. The percentage of workers covered also declined when companies sought to have dual earner couples each get covered by their own employer, and priced dependent coverage to encourage this. She made the strong point that the employer system works for long-term employees of most companies and that there is at present no comprehensive private

alternative to employer coverage. In addition to employees of small firms, employee coverage does not work well for those without stable or regular employment and those in firms that do not offer coverage.

There are obviously different perspectives on this topic. In February I attended the Retirement Income Industry Association (RIIA) meeting where a financial planner, Chris Cooper, spoke about issues related to health benefits from the perspective of providing advice to individuals. Apparently many of his clients are independent or work for small firms. He had nothing positive to say about the employer system. He also pointed out that when one spouse loses employer coverage and is unable to obtain it from the other, it may be advisable for the couple to divorce. His rationale was that current law in all states requires that the couple would both need to apply for Medicaid together, but if they divorce and shift assets to protect them, the spouse without coverage may apply for Medicaid alone. This seemed to me to be an extreme idea, but I spoke to him about it later, and he indicated that it happens more often than one would think, particularly where the person without coverage has chronic illness.

Health Care and Bankruptcy

Health care is often a significant factor in personal bankruptcy. This can happen if someone does not have insurance or if they have a major illness and spend more than the maximum on the insurance. This was highlighted recently in a CNN special featuring Sanjay Gupta. Public awareness of these issues is clearly growing. This fit well with the discussion mentioned above from the financial planner.

Mandates

A system for universal coverage would effectively be a tentament. In other words, the design of such coverage would create a mandate. In addition, mandates in some form are a possible part of either of the first two solutions. They can be structured in various ways and there are many questions about how to structure them

- Is the employer required to offer coverage?
- Should there be an individual mandate?
- What aspects of coverage are mandated?
- How do you enforce a mandate?

One session of the conference was on mandates, and the presentations are available on the NASI Web site.⁵

Models to Look at for Change

If we focus on universal coverage, Canada and the United Kingdom are obvious models to analyze. Both countries have single payer systems and supplemental health insurance. Both countries have had these systems for a long time. Supplemental coverage can be used to pay for services not covered and in the United Kingdom, to receive treatment more quickly than under the public system. Both countries spend much less on health care than the United States. I have found that in trying to understand whether the systems work well, opinions are very mixed. Some people say they work very well and others say not so well.

There are a variety of other models that are also of interest. Individual States in the U.S. are involved in a wide variety of reforms and are interesting models to review. In many ways, the direction we are moving in would provide for the states to be like “laboratories” for national reform. The Netherlands and Switzerland have also recently changed their systems. There was a very interesting presentation on the Netherlands which has a hybrid system—something between public and private and close to universal coverage. Kieke G.H. Okma, Wagner School of Public Services, NYU, presented information about the Dutch system. Pertinent features of the Dutch system include:

- Health insurers are usually not-for-profit, but can be for-profit.
- Residents are required to take broad coverage and pay 6.6 percent of their income as earmarked taxation and in addition a community rated premium to the insurer.

- The insurers are highly regulated and the system includes subsidies for the poor, and some redistribution of funds so that the insurers with a greater share of high-cost people are compensated.
- The majority of hospitals and health facilities are independent and usually not-for-profit.
- Most family physicians are self-employed.
- Market choice has been accompanied by market concentration—opposite of what some people expected.
- The system is highly regulated with subsidies at various points and depends on social ideas of solidarity.

There is other evidence of differing perspectives. The ERISA Industry Committee’s New Benefits Platform describes an alternative that includes a very different structure. This proposal includes many interesting features, including options for individuals without coverage to buy into regional cooperatives and mandates.

Getting to a Solution—Reaching Consensus

This will be extraordinarily difficult in the U.S. environment and has been a major reason why pensions and the health care system have so many problems. There was a panel that discussed this, but I do not think they had much in the way of advice other than engaging the public.

These discussions challenged me to think about some questions:

- What is the best way to understand the key options that are on the table?
- What should be on the table?
- **How can actuaries participate in the debate in a meaningful way?**
- What should the role of the employer be?
- What are the successes and failures around the employer system?
- How important is universal coverage or universal access?

(continued on page 32)

⁵ http://www.nasi.org/publications2763/publications_show.htm?doc_id=660141&name=Medicare

Health care is often a significant factor in personal bankruptcy.

- What are the implications of mandates?
- Who can help parties with very different views come together and compromise?
- What is the impact of the level of health care spending on the economy?
- What can we learn from the states?
- What can we learn from the Netherlands and other countries?
- If we retain the employer system, how do we deal with the uninsured?

- Many countries treat health care as a fundamental right, as they do education. Why is this not true in the United States?

Note: The actuarial profession is working to cooperate with NASI. The Society of Actuaries and the American Academy of Actuaries jointly sponsored a table at the conference dinner, as they have for several years. The SOA research on post-retirement risks was presented at a conference round-table. 📷



FOR HEALTH ACTUARIES:
SOA BOOT CAMPS

PRICING BOOT CAMP
August 11-12, 2008

Take part in this unique program to examine pricing methods and approaches.

VALUATION BOOT CAMP
August 13-14, 2008

Participate in this technical and rigorous seminar to increase your valuation knowledge.

LANSDOWNE RESORT, LANSDOWNE, VA

Learn more at www.soa.org.



his age 80+ patients undergoing heart procedures, where he said only one in three have a good outcome.)

Medicare reimbursement rates for heart procedures create profit centers within hospitals. It is not surprising there has been an influx of catheterization labs into this lucrative field with no shortage of patients. As classic example of supply-induced demand, researchers have found a strong correlation between high incidence rates of procedures and greater availability of services.

Medicine is always in search of “the desperate cure.” If some chemotherapy is good, it only seems to reason that more chemotherapy must be better. Chapter five tells the story of Dr. William Peters, his advocacy of bone marrow transplants for the treatment of breast cancer, the quick uptake, and the legal battles with feminist overtones that ensued to get insurance companies to pay for this treatment.

After 10 years of clinical trials, researchers ultimately concluded that the short extension of life for some patients was offset by the mortality due to the treatment. While bone marrow transplants for breast cancer have been discredited, other treatments of unproven efficacy pervade the medical landscape, such as spinal fusion therapy.

People and medicine seem to love new technology! Seventy-six million tomography scans were performed in 2005, up from 40 million in 2000. If the growth rate persists, 100 million scans will be done in 2010—one for every three Americans. Brownlee writes, “National Imaging Associates, a company that helps insurers decide how to pay for imaging services, estimates that at least two thirds of MRI’s contribute nothing to physicians’ ability to diagnose their patients accurately. In 2002, Blue Cross Blue Shield of Missouri calculated that 20 to 30 percent of their claims for PET, CT, and MRI scans were for unnecessary tests. In states where malpractice laws make it less likely that doctors will be sued, there’s only about a 15 percent difference

in the amount of unnecessary treatment doctors deliver.”

Now there is a rush to buy the latest new 3-D and 64 slice CT scanners, described by Brownlee as a parlor trick by some radiologists because they don’t really provide new information. Imaging procedures are big profit centers for hospitals and now physicians have gotten into the game, potentially contributing to supply-induced demand.

Much criticism has been written about the pharmacy industry, the fastest growing sector of health care, where harmful drugs have made their way into the market for extended periods of time. Brownlee provides insights into the life cycle of several harmful drugs and the lack of information to demonstrate that they were safe and more effective than conventional treatments. Our current system relies primarily upon the pharmaceutical industry to dictate what research is done and what information is disseminated. Bottom-line agendas and conflicts of interest provide strong incentives for biased research and conclusions.

Brownlee also discusses at great length the marketing tactics of the medical industry. We’re all too familiar with the direct-to-consumer prescription drug advertising, which has been spectacularly successful. Brownlee writes, “...condition branding...allows marketers to extend a market simply by redefining disease; coming up with an entirely new disorder; or simply widening the definition of an old one, and then forging links in the minds of both physicians and consumers between the new definition and a particular drug.” Add to that, the cozy relationship between physicians and the pharmaceutical industry where influence buying appears to be alive and well.

The insurance industry, in particular the ability of HMO’s to contain costs and provide better medicine, does not escape Brownlee’s

(continued on page 34)

Exacerbating the situation is Roemer's law, a tenet of health economics that exhorts the notion of supply-induced demand when it comes to medical care. In the medical field of dreams, if you build it, patients will come.

perspective. It was a bit of a trip down memory lane as she recounts the effects of such early cost containment tactics as primary care gatekeepers, shifting extraordinary risk to individual practitioners, and strenuous pre-approval procedures. While HMO's have loosened their grips in some respect, they have been effective at ratcheting down reimbursements, perhaps contributing to the decline of family practitioners.

All is not broken and Brownlee has kudos for a number of health care systems, naming well-recognized organizations such as the Mayo Clinic, Kaiser Permanente, Intermountain Healthcare and Group Health of Puget Sound. She also touts Pursuing Perfection, a program started by a group of idealistic physicians in Bellingham, Wash., that uses a multidisciplinary approach to help practitioners prevent diabetes and chronic heart failure and to employ best practices for counseling patients on navigating the health care system and controlling their diseases.

She also tells the story of the remarkable transformation of the Veterans Hospital Administration under the direction of Kenneth W. Kizer beginning in 1994. Kizer led the effort to decentralize management, renegotiated contracts with suppliers and installed a computerized medical-records system now known as VistA. With a better computer system they were able to operate more efficiently, reduce errors, better coordinate care and perhaps most important, *measure outcomes and performance*. A neighbor of mine, who left a private medical practice for a position at our local VA, is now chief of staff and cannot sing its praises loud enough.

While Browlee does not have all of the solutions for fixing our system, she recommends we

focus on making sure we use the best, most valid evidence-based approach in the delivery of medicine. She advocates changing compensation to increase cognitive services and the number of family practitioners who can best coordinate care and manage chronic conditions. She believes it makes sense to pay doctors and hospitals as a group on a per capita basis to encourage them to better coordinate care and render appropriate amounts of care. She advocates that Medicare change its reimbursement rates to stop overpaying for radiology and heart procedures, which creates profit centers and encourages unnecessary discretionary tests and procedures. In both public and private sectors, quality can be measured and reimbursement can be decreased to those facilities that don't measure up or facilities can be turned over to the VHA. Government can facilitate the transformation to electronic records by making VistA available to other hospital systems.

In this short article, I have only been able to touch upon some of the high points of *Overtreated*. I'm sure that many medical professionals will take issue with Brownlee's conclusion. However, as a consumer of medical care, so much of what Browlee has to say rings true.

As I reflect upon my family's encounters with the medical system, I can think of many instances of unnecessary tests and treatment. The list would begin with the removal of my tonsils at age five, a procedure so common it was practically a rite of passage for my generation. And the list could go on and on.

As health actuaries, we can participate in a number of ways to help improve the medical industry through such things as the design of better reimbursement systems, the encouragement of evidence-based medicine (see, for example Goldman's article in our last issue), and the measurement of quality and performance. Even if your career path does not take you in this direction, *Overtreated* provides insightful food for thought for all health care consumers.

In This Issue

With the presidential race in full swing and the health care reform debate heating up, this edition of *Health Watch* features four articles focusing on health care financing reform. In our cover article, Catterall relays what he learned from health care luminaries at the 2007 Health Policy Summit. There are two opinion pieces, one from Professor Lawrence Gostin of Georgetown Law and the other from Ian Duncan, recapping a debate from the 2007 SOA Annual Meeting. Professor Gostin argues that the health care crisis requires a fundamental change in the structure of the system (possibly even single payer), while Duncan argues that there is no health care crisis and the market will fix itself (especially if the government leaves it alone!). Our last article on this topic is by Anna Rappaport, who reflects on what she took-away from the National Academy

of Social Insurance annual conference “Getting to Universal Health Insurance Coverage.” She also offers a few opinions of her own, which offer a sharp contrast to Duncan’s positions.

Health actuaries have unique abilities and perspective when it comes to health care financing. With this comes a profound sense of responsibility—that of keeping the debate rational. It will be very interesting and hopefully satisfying to see the contributions the actuarial profession makes. 📧



Cost of Paper to Print SOA Research Report: \$0.17
New Health Research Ideas: Priceless



The SOA Health Section Council is seeking new research ideas or proposals on a health-related topic for potential funding. The Council has a dedicated annual budget to fund research projects that benefit health actuaries. You can submit a proposal or idea at any time. Proposals are chosen among those submitted for funding based on their relevance to health actuaries and available budget. Examples of prior studies funded include the newly released report on the commercially available Risk Adjusters and the Impact of Medicare Part D on Drug Costs study. Here's an opportunity for you to advance the profession and potentially uncover new knowledge!!

For more details on how to submit a proposal and the selection process, please contact Steven Siegel, SOA research actuary, at ssiegel@soa.org.

“Actuaries will play an important role. Our profession will be called upon to help solve a significant and complex social problem...”

payment rates were on average about 134 percent of FFS Medicare; this compares with roughly 121 percent for urban floor counties.

The MedPAC Report

In their June 2007 report to Congress, MedPAC proposed that CMS reduce MA benchmarks to the same level as FFS cost in each county. This recommendation is of enormous import and will have a dramatic effect on the managed Medicare market. MedPAC suggested four different methods that CMS might employ. Since MA rates are updated annually, there are a few variables that can be used as adjustment levers to achieve this end:

- Time—over how many years should margins be reduced to 0?
- Rate of decrease—constant, accelerating, decelerating?
- Which counties are affected when—counties with highest margins first, all counties by the same amount, all counties by same percentage, etc.?

MedPAC suggested four possible methods to reduce rates:

1. Freeze Benchmarks where they are now.
2. Cap Benchmarks at some maximum percentage of FFS Cost.
3. Phase in a blend of MA Benchmark with FFS Cost.
4. Competitive Bidding.

The proposed endgame is the same for each of the four methods—MA payment rates that equal the Medicare FFS costs in each county.

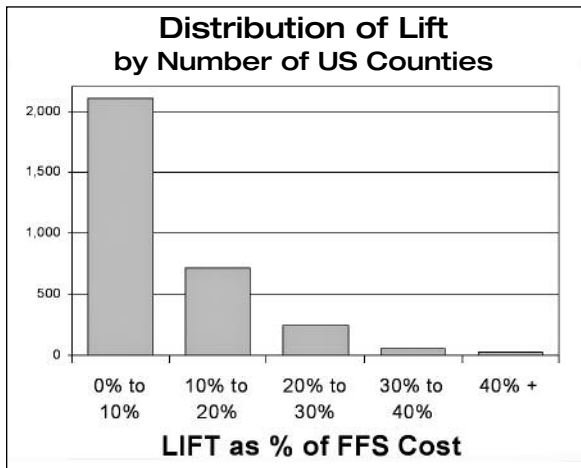
1. Under Method 1, medical trend would cause the FFS cost level to rise until it is as great as

the frozen MA rate. The margins in counties whose MA rates are already close to FFS cost would be affected first and most in terms of margin reductions expressed as a percentage of FFS cost. Those counties that have the highest margins could still have higher MA rates than FFS cost for many years. You could think of this as the “Highest Margins Stay Highest” approach.

2. Under Method 2, all counties whose MA rates are in excess of the cap in year one, say 130 percent of the FFS cost, would be cut to 130 percent. All the counties below 130 percent remain untouched. Assuming linear decreases to the maximum over a four-year period, under method 2 the caps might decrease systematically, such as 130 percent in year one, 120 percent in year two, 110 percent, and 100 percent. Think of this as the “Highest Margins Reduced First” approach.
3. Method 3 would implement the margin cuts by blending MA Rate with FFS cost over time, such as 75/25, 50/50, 25/75, and 0/100 over four years. According to this formula, a county at 140 percent in year zero goes to 130 percent in year one, 120 percent in year two, 110 percent, and 100 percent.
4. The fourth approach is harder to envision and explain. RPP0 and PD rates are set with competitive bidding, so this could involve a blend of bids and MA rates, which seems counterintuitive—the plans with the lowest bids that deliver care most efficiently would seem to be reduced more and thus penalized for it.

As MA rates move to the FFS level, the effects of reduction will play out differently by geography—some states affected more than others. For example, states with the highest margins in their county rates will be affected more. In order to visualize the aftermath of reductions in margins, it is helpful to look at the

distribution below of the number of counties by margin percentage:



- Reconsider method 1 first. The distribution is right-skew and the majority of counties have margins less than 10 percent of FFS cost. If medical trend is five percent in year one, then the counties with margin greater than five percent will decrease by that percentage; and the counties that have less than five percent margin in year zero will have no margin in year one. At the other extreme, a county with a margin of 50 percent in year zero will go to about 45 percent.
- Method 2 starts with the counties that have the greatest margin and reduces them to some maximum level. Using the example above of 130 percent, 120 percent, 110 percent, and 100 percent, all the bars to the right of the annual maximum will move to the left and stack on top of that bar. If the year one cap is a maximum of 130 percent, then the two bars for 30 percent to 40 percent and 40 percent + will stack on top of the 20 percent to 30 percent bar with a probability mass at 130 percent. In year two, there will be two bars only, etc. According to this method, it seems that most of the counties will not be affected until year four. In fact, the counties with the greatest margins tend to be rural counties with relatively low popula-

tion, so it is important to also consider the margin distribution based on the number of Medicare eligibles.

- In order to understand method 3, consider two different counties: Country A has margin of 10 percent and Country B has 60 percent. A 75/25 blend in year one reduces their margins to 7.5 percent and 45 percent respectively. With each passing year, the right-most bars become shorter and the left-most bars get taller.
- Method 4 is somewhat similar to method 3, but instead of blending the county-specific benchmark with 100 percent of FFS cost, I suspect that the benchmark would be blended with the average bid in that county. Bids are typically less than benchmarks—this is one of the favorable results of managed competition. A simplified example (assuming an average risk score of 1.0) helps explain how this would work for two different carriers in the same county with a 25 percent margin in year zero. Both carriers' plans are assumed to be zero premium to the members:
 - a. The first carrier is an HMO that can deliver the exact same MA services as

(continued on page 38)

A/B Medicare using Medicare reimbursement to providers and 20 percent utilization savings due to effective coordination of care. Consequently it generates savings and a rebate of \$120 (just a guess). It gives the rebate back to its members in the form of a richer MA benefit plan than the traditional A/B Medicare plan—an MA plan with lower member cost-sharing (than traditional A/B) and a few additional benefits such as vision, preventive dental, and a standard Part D drug plan.

- b. The second carrier bids a PFFS plan that is identical to A/B, and the second carrier delivers no utilization savings. After it incorporates the cost of administration and profit into its bid, the second plan has no rebate. Consequently, the second carrier's actual benefit plan is far less rich than the first's. Carrier two has standard Medicare cost-sharing, and no standard drug, etc.

Carrier one has a bid that is \$160 less than the benchmark; carrier two's bid equals the benchmark. It seems that blending the benchmark with the HMO plan's bid drives the adjusted benchmark (per method 4) to a lower level than would occur if blending the benchmark with the second carrier's bid. This is why, as stated above, this approach seems counter-intuitive.

The last point to cover in this article is the relative "efficiency" of MA HMO vs. PFFS. The following table shows that HMO is more efficient than traditional Medicare, but PFFS is not:

MedPAC on PFFS in MA—Efficiency

As % of FFS Cost	ALL	HMO	PFFS
BENCHMARK	116%	115%	122%
BID + REBATE	112%	110%	119%
BID ONLY	99%	97%	109%
REBATE	13%	13%	10%

Despite having to pay commissions, higher administrative expenses, and a profit charge, private MA HMO plans still manage to provide a benefit plan equivalent to A/B Medicare for a cost that is three percent less on average than the government pays to deliver the same. Note, however, that the same is not true for PFFS—after all the claims and expenses are paid, PFFS plans spend 10 percent more than the government to deliver the same level of benefit as Medicare A/B. Typically, HMO, PPO, and PFFS plans provide a richer benefit than traditional Medicare. Some of this extra benefit may be subsidized, at least in part, by the margin in the payment rate; based on the efficiency data, this occurs more for PFFS than HMO & PPO.

Should 100 percent of FFS cost be the upper limit of MA benchmarks? Benchmarks levels have risen and fallen with changes in political and market conditions over time. The debate may be over, however, and if the reduction of benchmarks to 100 percent of FFS cost is a foregone political conclusion, then it seems to me that MedPAC will need to formulate a margin reduction strategy that 1) does not disproportionately penalize more efficient plans, and 2) maintains the other goals and objectives of the MA program, such as offering choice to Medicare beneficiaries in urban and rural locations alike.

As Congress decides how to contain increasing Medicare cost and, more specifically, restrain MA funding levels via margin reductions, the issue of equity will be a critical consideration. Actuaries will play an important role. Our profession will be called upon to help solve a significant and complex social problem that will require advanced quantitative capabilities. We are well-equipped to meet this professional challenge. ❏

except perhaps for some stop-loss business. Increasingly, however, carriers are offering trend guarantees to large self-insured customers. Typically, the carrier puts a portion of their administrative fees for a policy year at risk if trend exceeds a specified percentage. While this may not sound like a big deal to an actuary who works with insured business, there may be several million dollars at risk. Enough that even a large carrier sits up and takes notice.

Trend guarantees are always a risky proposition, but the fact that the carrier may not know about anticipated changes adds to the risk. For example, most carriers are working now on trend guarantees for 2009. If the customer implements a major change effective 1/1/2010, then the benefit rush in late 2009 may cause the carrier to miss the guarantee even if they otherwise predicted the trend accurately. To minimize this risk, more and more carriers are caveating the guarantees to limit the risk if a major change in offering is made.

Insured Business

Although the benefit rush impact tends to be greater for a large self-insured customer, the overall financial impact can be greater for an insured block of business, especially if the proportion of CDH and other large deductible plans is growing rapidly.

For small business pricing, many insurance companies offer a new business discount off manual rates to reflect the favorable impact due to underwriting. In the second year, the company is usually limited to an increase of 15 percent + the change in manual rates under small group regulation. The 15 percent is intended to cover underwriting wear-off and to correct somewhat

for unfavorable experience without causing undue hardship on the customer. Many carriers are hesitant to use the full 15 percent for fear of being accused of offering a low first year premium and then pulling a "bait and switch."

While this is always a problem, it is much more serious when a high proportion of CDH plans are introduced and the carrier is faced with the trend crush. There is no easy answer to the problem. The first year discount may be reduced, which may make them uncompetitive or they may reflect the crush and risk being accused of bait and switch.

For experience-rated cases, the underwriter should reflect the benefit rush pattern into premium calculations in a manner similar to the self-insured business.

The impact of a benefit rush on reserving is clear. An increase in annual claims in the three percent to five percent range translates to a 10 percent to 20 percent increase in claims in the fourth quarter. Since many insurers rely on projected claims costs instead of completion factors to estimate run-out on fourth quarter IBNR, the estimate can be inadequate unless the benefit rush is taken into account.

A more subtle impact, however, is the fact that a mini-rush often occurs at the end of the policy year on any type of high deductible plan. The mini-rush occurs as consumers satisfy their deductible and out-of-pocket maximums. At that point, services are either "free" if the out-of-pocket maximum is met or at least a lot cheaper if the deductible is satisfied. Savvy consumers will use that opportunity to receive optional services. If the block is stable, then the actuary can rely on seasonal patterns to develop the claims estimates. If the block is growing, however, the actuary will have to perform additional analysis to determine the impact. ❏

Exhibit 4: Explanation of Trend

Component	Trend Impact
Aging	1.0%
Large Claims	2.0%
Recontracting	5.0%
Core Utilization	3.0%
Benefit Hush	-2.0%
Other	1.0%
Combined	10.0%

Health Section Announcements

Individual and Small Group Health Insurance Underwriting Seminar

Mark your calendar and plan to take part in this unique seminar, Sept. 18-19 in Chicago, to gain a broad and objective update on developments in individual and small group health insurance underwriting for chief health underwriters, health actuaries, health claims managers, senior health insurance management, industry consultants and industry service providers throughout North America. All of the presenters are experts in their respective fields of health insurance risk management. In this seminar, you'll gain insights into the product and market; increase your ability to analyze problems and challenges related to health insurance underwriting, and learn how to creatively solve those problems. This seminar provides you with an opportunity to increase your knowledge and position yourself as a leading expert in understanding and solving health insurance underwriting challenges at your company. More information will be available soon at <http://www.soa.org/meetings-and-events/event-detail/ind-small-grp-hlth-seminar/default.aspx>.

Critical Insurance Conference

Whether you're considering selling critical illness products or are beginning to explore the details of the industry, this is the one conference you must attend! Leading the industry, the 2008 Critical Illness Conference, Sept. 22-24 in Las Vegas, is sponsored by LIMRA, LOMA, the Society of Actuaries and the National Association for Critical Illness Insurance, and will provide the cutting-edge information you need to understand the challenges and opportunities this market presents. Increase your ability to analyze problems and strategies related to critical illness insurance, learn creative solutions to those problems, and understand how to communicate those solutions to your company and your customers. Register now at <http://www.soa.org/meetings-and-events/event-detail/critical-ill-ins-conf/default.aspx>.

Introduction to Predictive Modeling: Techniques and Applications for Insurance Actuaries

Predictive modeling has entered almost every facet of industry, government, and academia, and its applications for insurance are only beginning to be realized. This two-day introductory course, Nov. 10-11 in Chicago, offers life actuaries a practical, working understanding of predictive modeling tools. Beginning with a discussion of data considerations, the course next provides a review of leading techniques—Neural Networks, General Linear Models, CART, and others. The remainder is spent on a case study, providing attendees with a solid grasp of how predictive modeling can be applied in the real world of insurance. More information will be available soon at <http://www.soa.org/meetings-and-events/event-detail/predictive-modeling/default.aspx>.