

## SOCIETY OF ACTUARIES

Article from:

# Health Section News

June 2002 – Issue 46



# HEALTH SECTION NEWS

"For Professional Recognition of the Health Actuary"

Issue No.46, June 2002

### Hospital Charges Become A Significant Issue Again

by John P. Cookson

ver the past few years hospitals, through consolidation and affiliations, have gained back much of the negotiation strength they had lost to HMOs and PPOs during the late 1980s through the midto late 1990s. As a result of this strengthening, hospital charge levels have become a more significant issue than they were five years ago. Many out-of-area and out-ofnetwork payments are a function of charges, many innetwork contracts (especially outpatient) are still based on discount from charges, and in-network contracts based on fixed payments have increasingly added stop loss provisions that convert the payment to a percentage of charges once the case reaches a charge threshold such as \$25,000 or \$50,000. In addition to the high cost impact on hospital claims, these stop loss provisions have caused particularly high cost escalations at some



reinsurers that provide catastrophic claim stop loss protection for employers and insurers.

There are substantial differences in charge levels by hospital, and these differences are not readily available to most employers and claims payers. In order to understand and measure these

(continued on page 4)

#### Hospital Charges Become A Significant Issue Again by John P. Cookson .....1 Chairperson's Corner by Dan Wolak .....1 Letter from the Editor by Jeffrey D. Miller .....2 Insurers Giving Away The Store With

In This Issue

Aggregating Specific Pricing by G. Sullivan & M. Condos .....5

/aluing Non-Traditiona	I Health	Products
n the City by the Bay		6

Population Risk Management: Identifying High-Risk Members to Reduce Costs
by lan Duncan7
Pricing Aggregate Stop-Loss Coverage
by Chuck Fuhrer9
Health Costs Rise—Implications for Student Health
by Paul A. Cronin
All Aboard the Critical Illness Insurance Express!
by Loretta J. Jacobs
NAIC Health Update
by Rowen B. Bell

### Chairperson's Corner: Looking Back...

by Daniel L. Wolak

wenty-five years! Wow, it's been twenty-five years since I started in the group life and health field. I remember that summer day, walking into the CNA offices Dan in Chicago and Wolak having my desk in a pod shared with five other young, aspiring actuaries. There was Bruce Iverson (now on the SOA Staff overseeing research), Mitch Serota, Eric Smithback, Bill Sonnleiter and Kathy Manning. I remember after working that day. I attended a ball game on the "south side" to see my team back then, the White Sox, take on Reggie Jackson and the team which I now enjoy seeing with my son, the Yankees.

Twenty-five years. So what have I seen in the health insurance market from the risk taker side, that is, insurance and reinsurance side? I've seen changes in health plans (going from Base + Supp to MSAs and cafeteria plans), new ways to control claim costs (hospital utilization review in the '80s to negotiated fees for PPO's in the '90s), small group medical pricing (select and ultimate pricing to small group rating laws) and healthcare trend (rising in the '70s to... well, rising currently...some things don't change).

Experience is always the best teacher, but at times a comment or tidbit from someone else can be very helpful. Okay, as a health actuary "enjoying" my silver anniversary, the following are several of my thoughts on "lessons



Hospital Charges Become.. continued from page 1

differences, a geographic, case-mix, severity adjusted relative charge index has been developed to rank each unique Medicare hospital billing ID. This covers virtually all hospitals, but is underrepresented in Children and Maternity hospitals. Medicare data charges (Medpar database) are adjusted to a common geographic area, and a relative value scale is developed by DRG and severity. As a result, each hospital can be benchmarked reflecting its overall case-mix and severity. The benchmark comparison can also be evaluated at finer levels of detail, such as admission type, Major Diagnostic Category (MDC) and DRG. This benchmark can be viewed on both a per day and per case basis. In addition, avoidable days (efficiency of LOS) can be incorporated and the per diem can be benchmarked to reflect the efficiencies of hospitals that better manage their LOS.

The results of our analysis reveal a number of interesting facts. First, the range of relative geographic, case-mix, severity adjusted per diem charges is quite broad, from as low as 70% below average, to as much as 334% above average. In terms of actual charges, the highest hospital was nearly \$16,000 per day for medical/surgical cases, with several others charging over \$10,000 per day and nearly 60 charging over \$7,500 per day. The highest charging hospitals tend to be clustered in California, Texas, New Jersev and Pennsylvania. Since the charge master within a hospital is the same per service irrespective of the payer, it is logical to assume that the commercial and Medicare charge levels are related. This can be tested by comparing the Medicare and other payer charge distributions for the hospitals from 20 states that make their hospital data publicly available. If this demonstrates consistency, then this information can be used to generalize the Medicare data for all

hospitals to estimate the commercial charge levels nationally.

A similar relative value analysis was completed (as described above for the Medpar data), using the state data separately for Medicare (with at least 1000 cases) and commercial (despite this, some hospitals may have less than 200 commercial admissions) primary payer categories. The correlation between the Medicare and commercial state data per diem charges is over .95 over all admission types. Given claims volume differences within hospitals between Medicare and commercial

### **6** The highest charging hospitals tend to be clustered in California, Texas, New Jersey and Pennsylvania.<sup>2</sup>

this is very significant. We believe even better results can be produced by separating out routine room and board charges from ancillary charges, and medical/surgical from psychiatric/ substance abuse cases. Ancillary charge per day for Commercial payers tends to be higher (all other variables held constant) because of the lower average LOS for commercial patients. Since not all of the state databases have room and board charges separately identified, this must be tested with a smaller subset of the state data. Preliminary tests on a smaller subset indicate more accurate predictions on this basis.

There are a number of uses for this analysis. The first is network selection, which in connection with the negotiated reimbursement contracts and discounts, can be used to determine the most cost effective network and hospitals. This can also be linked with quality data measures based on the same dataset. Hospitals with stop loss reimbursement provisions can also be reviewed in terms of appropriateness of charge levels, with the understanding of the impact before such contracts are signed.

A second use could be to develop a Reasonable and Customary scale for out-of-network, out-of-area charges. A reasonable relationship to average charges, or a limit based on specified percentiles can be easily developed. This can also be used as a starting point for negotiation on individual claims.

A third use would be as a proxy for outpatient charges. Since the ancillary charge levels for specific services are the same whether done on an inpatient or outpatient basis, the ancillary relative values can be used as a proxy for outpatient charge levels. This would also reflect the impact of higher or lower utilization pattern (intensity) differences between hospitals. These ancillary charges could even be further split by type, such as lab, x-ray, etc.

Finally, recent cost to charge ratios from filed Medicare cost reports can be applied to the charge levels in order to estimate approximate costs, which can also serve as a starting point for negotiating a reasonable reimbursement level.

Extracting this kind of information from the reams of health care data and knowing more about the differences between providers is already being accomplished. The task now is to put it to good use. Clearly, managed care has been on the retreat for several years. However, employers and individuals are not readily accepting of every increasing health care costs that rise far faster than their incomes. The next evolution in controlling costs may be through widespread dissemination of useful specific information about cost and quality of healthcare providers.

John P. Cookson, FSA, MAAA, is a consulting actuary at Milliman USA in Radnor, PA and vice chairperson of the Health Section. He can be reached at john.cookson@ milliman.com.