

## SOCIETY OF ACTUARIES

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### Life in LA: Predicting the unpredictable

by Song Song Shu

Recently, living and doing actuarial work in Los Angeles have been filled with unpredictable experiences. Riots, brush fires, and the very recent "almost big one" have made life and work interesting and challenging.

Take the week of January 17, for example. Monday was Martin Luther King's Birthday and a public holiday. It should have been "predictably" restful. However, an earthquake measuring 6.8 on the Richter scale struck the greater Los Angeles area at 4:27 a.m.

My company, Health Net, was just five miles from the epicenter. All staff was advised to take a couple of days off and not to come to work until the buildings had been inspected. City inspectors and private engineers were brought in to examine the 20-story concrete and steel building and concluded that it withstood the quake no elevator services, we had to climb 15 flights of stairs to reach our work area. We were asked to sign a waiver of responsibility in case we were injured by the "cosmetic damage" to the building. By Friday morning, things seemed to be back to normal. Just when everyone was feeling a little more relieved, aftershocks above the 4.5 level occurred, and the building was evacuated.

More than 75 employees, or about 8% of the company, had to move out of their homes. To relieve emotional stress, the company provided individual and group counseling sessions, attended by more than 300 employees and their families.

#### **Effects on business**

Eight of our 24 provider groups had sites operationally affected by the earthquake. Our HMO members were



well without structural damage. "Green tags" were posted, indicating it was structurally safe to enter, and we returned to work on Thursday.

#### Effects on employees

Several unpredictable problems, such as no running water or ventilation, made our return to work a challenge. The company provided bottled water and portable, outside rest rooms. With Receipt
Inventory
Fortunately, most sites were able to reopen within a week. By mid-March, only two were still not operational, and they will be closed for at least four months. At a one-story warehouse in Chatsworth, only two miles from the entropy of the entropy of

redirected to

5% of our

other provider facilities. About

members were affected by closed

medical centers.

miles from the epicenter, the company lost \$1.35 million in inventory from water damage when the earthquake triggered the sprinkler system.

#### **Effect on actuaries**

The actuarial department also was affected. We saw a major impact on our incurred but not paid claims estimations, with significant changes in normal claims payment patterns. For example, the weekly claim receipt level dropped 75% in the week of the earthquake, primarily due to the two-day delay in mailing services (see graph on this page).

Even with this drop in receipts, claims inventory increased by the end of the second week due to missed working days. These factors contributed to a 24% reduction in claims paid per member per month relative to December. This, of course, caused an increase in the claims reserve level.

Despite some minor emergency claims incurred during the earthquake week, the overall level of claims incurred for January appears to have been unusually low, in contrast to normal seasonal patterns in which January claims usually are much higher than those of November and December.

#### Long-term effects

The long-term impact of the earthquake is even less predictable. In the next few months, we may find that the psychological disturbance caused by the earthquake will result in an increase in mental health claims and other stressrelated illnesses. We will be monitoring trends very closely in these areas.

We also are concerned about the possible impact on our membership base from business closings and people moving out of the Los Angeles area. This could change demographic distributions and possibly decrease health care plan enrollment.

With all the recent natural disasters, regulatory authorities may impose requirements for catastrophic claims reserves.

All these unpredictable factors will make the actuaries' job of predicting and managing risk even more challenging in the future.

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