RESEARCH SUMMARY

April 8, 1999

Occupational vs. Non-occupational Benefits
Understanding Benefit Incentives Across Systems Avoids Misleading Results

In Brief: A new report by IBI compares occ and non-occ benefit costs and utilization for employees of 300 unionized employers with comparable benefit programs. For comparable claims, the study found lost-time claims in workers’ compensation are characterized by higher medical procedure costs, lower medical intensity, lower medical treatment costs and far longer disability durations. Instead of generalizing the results to all claims, IBI suggests individual factors (e.g., plan characteristics, the employer benefit environment and economic conditions in the industry) affect employer benefit costs and delivery more than aggregate occ and non-occ system characteristics. The wealth of detail available in this study permits analysis far beyond the aggregate results of earlier studies of medical treatment differences across occupational and non-occupational benefit programs.

Transcending first steps: Employers looking for savings to add to their bottom line are showing increasing interest in better managing occupational and non-occupational benefit delivery and costs. To help to lay a groundwork for understanding benefit differences, researchers in the 1990s published several studies examining the relationship between workers’ compensation and non-occupational-occupational medical treatment. They concluded workers’ compensation treatment cost more than treatment delivered through group health.

However, a study being published by the Integrated Benefits Institute, Occupational vs. Non-Occupational Benefits – Looking Beyond System Aggregate Experience, concludes the earlier studies, ascribing results to aggregate system factors, can be too limited in giving employers a realistic analysis of their benefit experience. IBI suggests employers take a more individualized view of their benefit interactions to begin to understand how benefits might be best managed.

Single employer context: IBI’s study suggests benefit costs and delivery results can be interpreted and understood only in the context of an employer’s benefit design and structure, disability and medical treatment interaction across occupational and non-occupational lines, and the economic environment. Earlier studies were limited to medical treatment differences and ignored the interplay of disability effects and injury severity differences (e.g., lost-time claim results versus injuries requiring only medical treatment). Without analysis of such individual characteristics, IBI suggests little can be learned from aggregate comparisons across benefit programs.

Current study: IBI built a database reflecting workers’ compensation, group health and short-term disability (STD) benefit results for 300 employers in a unionized environment for the period 1992-1995. Benefits provided were comparable for all employers. Workers’ compensation medical benefits were
unlimited and furnished at no cost to employees. For group health, if the worker stayed in the network
the PPO charged the worker a $15 co-pay per visit. The PPO Group health fees were 25% lower than
the workers’ compensation fee schedule.
Maximum occupational weekly disability benefits were 24% higher than for non-occupational claims.
They also were unlimited in duration compared to a six month maximum for STD. The employers in the
study group did not provide non-occupational long-term disability benefits.

Workers’ compensation premiums for individual employers were not adjusted by the employer’s own
experience. Employers provided no sick pay or vacation. The collective bargaining agreement limited
the number of weeks union members could work before returning to the hiring hall in periods of high
unemployment, such as existed during the study period.

Comparable injuries: IBI compared injuries by limiting the analysis to body part injuries common to
both occ and non-occ injuries. IBI linked non-occ medical treatment to related disability to create non-
occupational “episodes of care” comparable to workers’ compensation claims.

Pareto group: After the adjustments, IBI found only 17% of employees were responsible for 80% of
benefit costs over the study period. Employers interested in controlling benefit costs are likely to find
the greatest savings in identifying and managing the types of conditions likely to generate
disproportionate costs. As expected, injuries involving only medical treatment were filed with similar
frequency in both occupational and non-occupational systems – about 30% of the workforce filed
medical-treatment-only claims in both systems. However, lost-time claims showed the largest benefit
utilization differences between occupational and non-occupational injuries. Although 2.1% of the
workforce filed non-occ lost-time claims, the frequency of workers’ compensation lost-time claims was
almost six times higher, with 12% of the workforce filing such claims.

Severity measures: The earlier studies did little or nothing to distinguish the effects of more severe from
less severe injuries. Lost-time and medical-only claims results were compared in the same analysis.
IBI’s results demonstrate the importance of examining lost-time claims separately from medical-only
claims – thus establishing a first cut at differentiating results by injury severity.

Medical-only claims: Comparing medical-only claims across occ and non-occ systems provides few
surprises. As noted, the proportion of the workforce filing such claims was similar in both systems. In
addition, costs per claim were almost identical, averaging about $540. Each system generated a similar
number of medical visits per claim (approximately three on average). Workers’ compensation had a
larger share of low cost claims, consistent with incentives to report more serious occupational medical-
only claims as lost-time claims. As will be discussed later, such an incentive may have existed for some
cases.
Lost-time cases: For these employers, there was a far higher frequency of lost-time cases reported in workers’ compensation than from non-occupational causes. Across all body parts studied, between 79% and 96% of the cases involving compensated lost time from work were treated in the occupational program. Average disability costs were 2.6 times higher for occupational injuries, at $8,759 for occupational injuries versus $3,381 for non-occ claims. This difference occurred because of higher weekly benefits and a longer duration for occupational claims. At the 50th percentile, occupational cases were one-quarter longer than non-occ claims. At the 75th percentile, workers’ compensation claims were 2-1/3rd times longer, and rose precipitously from there.

One might suggest the average cost difference occurred because of the six-month maximum duration of STD benefits, but the analysis showed few cases affected by the STD maximum. Alternatively, workers’ compensation cases could be more severe medically than the non-occ cases.

The analysis supports the opposite conclusion. Average medical costs for non-occupational cases were 24% higher, despite the fact workers’ compensation medical visits averaged 59% higher: 9.1 visits for occ claims versus 5.7 for non-occ medical treatment. Notwithstanding 25% higher scheduled medical procedure fees, occupational lost-time claims in the IBI study are characterized by lower costs per visit and lower costs overall, despite significantly longer disability durations. This is an apparent anomaly at odds with all the previous studies.

Controlling for other factors: To rule out various causes for the differences in temporary disability costs, the study controlled for other factors (age, marital status, time from last hire, type of injury, number of physician visits, physician visits per week and medical costs). The analysis still found the most influential factor affecting temporary disability costs to be the system in which the injury was compensated.

Suggesting one hypothesis: One clue to explaining these differences is the finding that occupational claims account for a larger percentage of relatively low-cost medical claims for lost-time claims as well as medical-only claims. This result is evidence of a possible shifting of claims from one bucket to another: here a shift from a medical-only occ claim to a lost-time occ claim. This shift would reduce the average medical costs for both medical-only and lost-time occupational claims. However, because jobs were relatively scarce, there would be an incentive to report claims in this manner only when a worker’s
eligibility to work under the union’s work-sharing program was about to run out, or the job was nearing completion and a return to the hiring hall was imminent.

Conversely, the interaction of plan design and a weak economy is likely to provide an incentive to extend occupational disability payments at a time when the alternative would be to draw down on unemployment eligibility. This goal would incent a tendency to report cases only marginally caused by work as an occupational claim to take advantage of unlimited temporary total disability and higher maximum disability benefits. If this occurred, the result would be a higher frequency of occupational lost-time claims, as we found here.

Other findings support such an hypothesis. For two sets of cases – over 90 days of disability and over 120 days of disability – the study identified a pattern in workers’ compensation of more intense treatment early on, with visits later in the case separated by significant time gaps. Such a pattern is consistent with medical monitoring for disability eligibility instead of high-intensity, higher-cost treatment services. For non-occupational disability cases, there is a relatively even flow of medical services over the course of disability. This identification of an occupational medical-monitoring function also supports the hypothesis that in workers compensation the incentives provided by unlimited, relatively more generous lost-time benefits at a time of high unemployment may encourage workers to draw out periods of compensable disability rather than drawing down limited unemployment benefits.

Conclusions: It would be misleading to conclude from the IBI research that workers’ compensation is characterized generally by low-cost, low-intensity medical treatment for lost-time cases compared to non-occupational benefit delivery. The earlier studies that concluded the opposite likely were equally confusing. Instead, the research techniques IBI employed suggest a more sophisticated explanation. The results are likely explained by an interplay of benefit design and delivery factors and economic conditions to result in the identified benefit payment patterns for these employers. Research in this area must consider the broad context for any findings and collect information on the factors surrounding – and influencing – benefit costs and delivery.

The study results also demonstrate that aggregate comparisons are likely to mask what truly is occurring at the employer level. Meaningful research in this area will resemble a series of case studies akin to IBI’s employer profiles. Rather than ascribing generalized characteristics to workers’ compensation systems or non-occupational injury benefits, it will be most useful to examine what happens to benefit costs and delivery under a number of different conditions, carefully identifying the broad employer and economic contexts for the findings.

Finally, the research furthers IBI’s goal of identifying and attempting to reach agreement on a variety of methodological issues. Failure to develop and use consensus methods for determining injury severity, injury type and non-occupational episodes of care will continue to confound efforts to produce comparable results, regardless of the research setting.

WPM/

Copyright 1999; Integrated Benefits Institute