Introduction

In December 2007, the American Medical Association published the sixth edition of its 'Guides to Evaluation of Permanent Impairment.' (“Guides”). Since 1996, various provisions of the Kentucky Workers’ Compensation Act have used the Guides as part of a formula for the award of weekly income benefits to injured workers who are determined to have a permanent partial disability. [See for example KRS 342.730 (1)(b).] Through the definitions section, these provisions have directed the use of the "latest available edition." [See KRS 342.0011 (35).]

The Guides have been a part of the language of the Kentucky acts since 1980, but not statutorily used for the award of all permanent partial disability benefits until 1996. The fourth edition of the Guides (published in 1993) was then in use. The fifth edition was published in September of 2000 and certified by the Commissioner of the Department of Workers’ Claims as available for use in March of 2001. Presently, through the actions of the Legislature, Kentucky continues using the fifth edition.

A great deal of controversy surrounded the initial publication of the sixth edition. Questions began to arise about its appropriateness even before it was physically available. As a result, the initial certification for the use of the sixth edition was delayed by Senate Bill (SB) 199 in the 2008 regular session of the Legislature and then again in the 2009 regular session by House Bill (HB) 333. In each bill, similar language directed the Executive Director (now Commissioner) of the Office (now Department) of Workers’ Claims to study "the feasibility and advisability of adopting the sixth edition…." In January 2009, the Commissioner submitted his original report with appendices, all of which exceeded 200 pages. Attached to this report as an exhibit is the narrative portion of the Commissioner’s original report.

This study, as mandated by HB 333, is less extensive than the original. This is due in part to limited additional information being available. With most jurisdictions having determined by very early in 2009 which Guides edition to use, significant ongoing analysis of comparisons between editions slowed. Those jurisdictions that have adopted the sixth edition do not yet have qualitative data on its impact, if any.

Conducting the Study

Unlike 2008, a study group to discuss the Guides was not assembled. The Commissioner has relied primarily upon review of publications, informal discussions with various stakeholders and attendance at seminars/symposiums that included presentations related to the sixth edition, its value and shortcomings. The publications reviewed included articles contributed by Dr. Christopher
Brigham, who served as a senior contributing editor of the sixth edition and has become the primary apologist for its use and methodology. Additional articles and studies prepared by Dr. Robert Bonner, Vice President, Medical Practice and Technical Support with The Hartford, were also beneficial. The IAIABC (International Association of Industrial Accident Boards Commission) Journal proved an excellent resource. The Fall 2008 edition of this journal was received in late December 2008, after preparation of the initial study of the AMA Guides had occurred. It was dedicated almost entirely to articles addressing and discussing the sixth edition. The Spring 2009 Journal provided insight from Dr. J. Mark Melhorn, a physician in private practice in Kansas.

Dr. Brigham presented at the 2009 Annual Issues Symposium sponsored by NCCI. Dr. Brigham and Dr. Bonner spoke to the IAIABC Annual Conference/Medical Institute.

By operation of its statutes, the State of Tennessee began using the sixth edition effective January 1, 2008. Conversations were held with the director of the Tennessee workers’ compensation system, and the chair of the Tennessee Workers’ Compensation Advisory Council was sought out for information.

**Current Use of the Guides**

According to the website "Impairment Resources" maintained by Dr. Brigham, the sixth edition is used by ten states: Alaska, Arizona, Louisiana, Mississippi, Montana, New Mexico, Oklahoma, Pennsylvania, Tennessee and Wyoming. The fifth edition is relied upon in sixteen states: California, Delaware, Georgia, Hawaii, Idaho, Indiana, Iowa, Kentucky, Massachusetts, Nevada, New Hampshire, North Dakota, Ohio, Rhode Island, Vermont and Washington. The fifth edition is also the one primarily referred to for use in federal workers’ compensation and other federal programs such as the Longshore Harbor Workers Act. Eight states still use the fourth edition, seven have developed their own Guides (some being hybrids of the AMA Guides), six specify no guide, two rely on the third edition, and Connecticut doesn't appear to direct the use of any particular edition.

Included as an appendix to the Commissioner's initial report was a summary of other states’ laws, the Guides edition used and how it is used. When referring to the adoption of the AMA Guides, many states do not use them as part of a mathematical formula to determine income benefits in every permanent partial disability claim. Tennessee, for example, which relies on the sixth edition and is the only contiguous state to Kentucky that does so, uses the Guides as one of many elements in the determination of benefits.

**Discussion**

What must be remembered in any discussion of the Guides, regardless of the edition, is that "impairment ratings that are used have never been evidence-based; rather, they reflect consensus of experienced physicians using a modified Delphi approach to achieve consensus.” (Brigham presentation, IAIABC Annual Conference/Medical Institute) As emphasized by Dr. Brigham, it is hopeful the diagnosis is evidence-based. The sixth edition and its proponents emphasize that its
assessment of impairment is diagnosis-based. However the DRE (diagnosis related estimate) was introduced in the fourth edition and continued in use with the fifth edition. The sixth edition uses the DBE (diagnosis-based estimate). The sixth edition, in its introduction, states outcome of procedures such as surgeries is being considered rather than simply assigning an impairment because a surgery was undertaken. This is a quality concept to the extent it focuses on impairment and not disability. The sixth edition is the first edition that acknowledges its use for the determination of economic benefits. Prior editions emphasized that impairments were intended for medical use and not as direct determiners of income awards.

One basis for altering the methodology in the assessment of impairment from the fifth to the sixth was a perceived high "rater" error. Both Doctors Bonner and Brigham opined that interrater error was excessive in the fifth and that the errors tended to be erroneous on the high side. According to Dr. Bonner, much of this could be attributed to spinal impairment assessments and the inappropriate use of range of motion or, alternatively, failing to use range of motion. Dr. Bonner performed an early analysis of ratings done using the sixth edition. He estimated an 80% error rate. However, further analysis and evidence of greater familiarity with the sixth has reduced that error rating to approximately 50%. A study conducted by Dr. Bonner's Hartford Insurance in 2005 analyzed ratings performed using the fifth edition, and this study found The Hartford experts agreeing with 52% of the assessments and disagreeing with the remaining 48%. Dr. Bonner identified numerous causes or potential causes for the disagreements and errors in both the fifth and sixth editions.

Identified in the initial report were concerns about the willingness of physicians and chiropractors to become qualified to perform accurate assessments. The accuracy of an impairment rating using any edition of the Guides is important. The amount of income benefits is significant to the lives of injured workers. The concern expressed during initial study, and continuing to exist, is the willingness of physicians and chiropractors to take the time to learn the new methodology and create thorough and quality reports. Few in Kentucky have been trained to use the sixth edition, and many who did receive training in early 2008 would be required to seek a refresher since they have not used that training. Adoption of the sixth edition would require the allowance of some time for this training to occur. This may be particularly true with treating physicians. Traditionally in Kentucky, treating physicians have played a significant role in the assessment of impairment. It seems to be acknowledged and even encouraged by the primary editors of the sixth edition that treating physicians will be unwilling to and should be less frequently involved in the assessment of impairment. Dr. Brigham states: "Physicians who do not perform impairment evaluations on a frequent basis are less likely to be familiar with the appropriate use of the Guides." and "Treating physicians must serve as patient advocates and therefore cannot provide an unbiased assessment of impairment." However, Dr. Kathryn L. Mueller in her article in the fall 2008 Journal writes: “In theory, the physician who is the most familiar with the patient is in the best position to render an accurate diagnosis. The argument against treating physicians also seems to conflict with axiom 3 of the sixth edition, which states that simplicity and ease-of-use be given precedent.” (sixth edition, page 2) There has been and continues to be concern with the number of available physicians willing to offer impairment ratings. Moving to the sixth edition will likely worsen the problem. Fewer physicians offering opinions will likely delay claims, the delivery of benefits, and increase the cost of impairment assessments.
As noted in the original report, income benefits are but a portion of workers’ compensation benefits and the costs attendant thereto. In its 2008 report, NCCI stated 68% of every dollar spent in Kentucky on workers’ compensation was for medical expenses. Its 2009 report reflected a slight reduction with 67% of every dollar in workers’ compensation being spent on medicals. Even with this slight improvement, it is clear that medicals continue to be the primary cost driver in workers’ compensation. Income benefits have been relatively stable over the last six years in Kentucky. Some of this stability can be attributable to the use of the AMA Guidelines and the familiarity of all involved in Kentucky workers’ compensation with the fifth edition. The adoption of a new edition and how it will impact income benefits is simply unknown. A change to the sixth edition will reduce benefits in some circumstances and the appropriateness of these reductions is still at issue. It also may increase impairment in other instances. The adoption of a new edition will generate litigation relating to the interpretation and appropriateness of assessments.

For the fourth consecutive year, NCCI has recommended a rate reduction for Kentucky employers; 2009 brings a recommendation for a 6.4% reduction. This reduction places Kentucky in the top one-third of the states for which NCCI provides recommendations in terms of improvement in premium rates. The only state adjoining Kentucky and relying on NCCI recommendations which has a greater recommended reduction is Missouri at 7.7%. Tennessee, in the initial recommendation, was recommended for a rate reduction of less than one-half of what had been recommended for Kentucky. As with any state, the use of the Guides or amount of indemnity benefits is not the sole factor in determining increases or decreases in premiums. In the past six years, Kentucky has seen a 5% increase in the overall average value of a permanent partial disability award. During the same six years, the average weekly wage of Kentucky employees has increased 18%. It, therefore, does not appear that the use of the fifth edition has been a major cost factor.

As noted by Dr. Mark Melhorn in the Spring 2009 Journal, “with each new edition of the AMA guides, ‘corrections’ have been made for real or perceived problems and abuses of previous editions that have undermined the goal of the AMA Guides to provide a valid, fair and unbiased impairment.” It is understandable that with each new edition this underlying mentality is to be expected. Methodologies for determining impairment ratings may change and should frequently be analyzed, but substantial swings in impairment ratings have been demonstrated in the transitions from each edition beginning with the third through now the sixth. The substantial deviations undermine the credibility of the “objectivity” of the impairment ratings themselves. As noted above, impairment ratings are not now, nor have they ever been, evidence based. Until they are, challenges will continue to arise relating to validity. As stated by Dr. Brigham in his article in the Fall 2008 Journal, “it is for legislators to frequently assess their benefit structure so that all factors, including impairment ratings, are taken into consideration in determining levels of compensation.” While this goal is laudable, frequent legislative changes as a reaction to a book published by doctors may be lacking in practicality.

It continues to be the belief of many that the methodology for the assessment of impairment, which is not to be confused with the impairment ratings themselves, is better in the sixth edition than previous editions. Presumably, the lengthy errata that was necessary to be published by the AMA in August of 2008 to correct the many mistakes in the initial publication has been incorporated in the second publication of the sixth edition in early fall 2009. The new methodology has been
embraced by those who make a living or regularly participate in the performance of independent medical examinations. There is a logical consistency from chapter to chapter. What is not clear is that the impairment ratings themselves are quantifiably more appropriate. The difficulty with the impairment ratings is that the "consensus" of experts seemingly changes substantially and frequently depending upon who is chosen to serve on the panel of experts.

**Conclusion and Recommendation**

Very little new information is available with regard to the differences between the sixth edition and the fifth edition of the AMA Guides to the Evaluation of Permanent Impairment. During 2009 entities and individuals have continued to discuss the ramifications of the sixth edition, but even the regular online discussion groups sponsored through Dr. Brigham's Impairment Resources have been discontinued. Our neighboring state Tennessee began using the sixth edition in January 2008, but has no specific data on what, if any, impact its use has had in Tennessee.

As recommended in the Commissioner's original report presented to the Legislative Research Commission in January 2009, much of calendar year 2009 has focused on addressing issues involving the entire Workers’ Compensation Act and attempting to analyze the Act to better equalize the cost of medicals in relation to the delivery of income benefits to the injured worker. This analysis is ongoing and several parties are working diligently to arrive at a potential solution to rein in medical costs, continue the delivery of high quality medical care and increase income benefits for wage replacement loss. With these potential changes, this effort has a goal of continuing the trend of downward costs of the overall system to Kentucky employers.

The Commissioner is of the opinion that, while difficult, it may be feasible to adopt the sixth edition, but it is not advisable to do so at this time. One of the hallmarks of relying upon an outside source such as the AMA to assess impairment to be used in a formula for awarding income benefits is consistency and certainty that will exist across industries and the entire Commonwealth. There is no question that the use of the fifth edition in 2009 is much more certain and consistent in its application than it was when initially adopted in 2001. All parties are well familiar with the impairment evaluations for all types of injuries and medical conditions from meniscal tears to total knee replacements and from neck strains to cervical fusions. In Kentucky the "erroneous" use of range of motion as opposed to the DRE and vice versa is now a rare occurrence. The number of litigated claims has stabilized, and even decreased, due in some part to the ability of the parties to resolve permanent partial claims prior to the need to initiate litigation. This result is contributed to by the parties having knowledge of the fifth edition and how it is to be used. Most issues related to how the fifth edition is to be interpreted have also been resolved. In the early days of the fifth edition, numerous cases were litigated through the appellate process. Adoption of the sixth edition would reopen all of these areas, and for some period of time certainty and consistency would disappear. Dr. Bonner's studies demonstrate the potential for widely disparate ratings during any potential transition phase.

The second hallmark of relying on outside guidance is "objectivity." However, as candidly acknowledged by senior editors of both the fifth and sixth editions, the impairment ratings themselves are not based upon scientific evidence or data, but instead upon "consensus" reached by
using a modified Delphi approach. Using experts is a valuable process; but when a single condition is found to have 14% impairment when using the fourth edition, 28% using the fifth edition and 4% with the sixth edition, it is not surprising questions occur on how objective these impairment ratings are. The experts involved are no doubt talented, knowledgeable and of the highest integrity, but they are offering opinions and not scientific facts, whatever edition is used.

It continues to be the opinion of the Commissioner that adoption of the sixth edition will significantly reduce the number of physicians who may be willing to perform impairment assessments. This will include both treating and examining physicians. The change in methodology for the analysis of impairment will require an effort to learn and be demanding in its application. Many treating physicians, for a variety of reasons, do not wish to assess impairment ratings now, and this will worsen with an adoption of the sixth edition. There are those who believe treating physicians should be out of the process because it is neither good for the system nor for the accuracy of the ratings. However, who should be better than the treating physician to provide an accurate diagnosis? Further, any question that may be raised about the bias of the treating physician has also been raised about the independent examiners and whether they are truly independent. Any issue of bias is considered by the judge assigned the claim.

It is the opinion of the Commissioner that it is in the best interest of Kentucky workers and employers to continue the use of the fifth edition of the Guides to the Evaluation of Permanent Impairment in assessing impairment ratings pursuant to the Kentucky Workers’ Compensation Act. It is further the recommendation of the Commissioner that the fifth edition be identified statutorily as the appropriate Guides to be used, and in the event of the publication of a new edition to the Guides the Commissioner should again study the advisability and feasibility of the adoption of the new edition, making such recommendation to the Legislature through the Legislative Research Commission.