Computational Medical Apportionment Determination for Impairment Ratings

JERRY ARTZ, Hamline Univ, St. Paul MN, MARTEN THOMPSON, JOHN ALCHEMY, MD, DANIEL PENN, MD, Alchemy Logic Systems, Santa Rosa CA — Unique computational techniques are used to calculate apportionment percentages for Whole Person Impairment (WPI) Ratings for workers with job-related injuries/illnesses. This interdisciplinary project includes collaboration among physicists, engineers, and concerned medical professionals. Medical providers are often asked to medically determine multiple contributing factors to disease states (e.g. diabetes, obesity, arthritis, and prior injury) in the context of personal injury as it pertains to permanent impairment. The process of making this determination is referred to as apportionment. The economic value of apportionment is far reaching and represents a significant impact to all stakeholders in the injury resolution and settlement arena. The process of apportionment is necessary to assign monetary value for the stakeholders when an injury occurs. The ultimate trier-of-fact is the judicial system. The medical providers role in this capacity is to apply known medical scientific knowledge and present it in a format that is objective and reproducible for the stakeholders. In this presentation the traditional challenges of apportionment will be outlined, and a novel approach creating mathematical bounding and modeling of pathology-weighted data sets will be presented.