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Medical Impairment and Computational Reduction to a Single Whole Person Impairment (WPI) Rating Value JERRY ARTZ, Hamline University, Saint Paul MN, JOHN ALCHEMY, ANNE WEILEPP, MICHAEL BONGIOVANNI, Alchemy Logic Systems, Santa Rosa CA, KUMAR SIDDHARTHA, CEO Greyfast LLC AND CTO Alchemy Logic Systems, Mumbai, India — A medical, biophysics, engineering collaboration has produced a standardized cloud-based application for creating automated WPI ratings. The project assigns numerical values to injuries/illness in accordance with the American Medical Association Guides to the Evaluation of Permanent Impairment, Fifth Edition, AMA Press handbook, 5^{th} edition (with 63 medical contributors and 89 medical reviewers). The AMA Guide serves as the industry standard for assigning impairment values for 32 US states and 190 other countries. Clinical medical data is collected using a menu-driven user interface which is computationally combined into a single numeric value. A medical doctor performs a biometric analysis and enters the quantitative data into a mobile device. The data is analyzed using proprietary validation algorithms, and a WPI Impairment rating is created. The findings are imbedded into a formalized medicolegal report in a matter of minutes. This particular presentation will concentrate upon the WPI rating of the spine—cervical, thoracic, and lumbar. Both common rating techniques will be presented—i.e., Diagnosis Related Estimates (DRE) and Range of Motion (ROM).

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