Accelerated Underwriting Definitions

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Algorithm - All of the following should be considered**:**

- A clearly specified mathematical process for computation (AI Bulletin)
- A set of rules that, if followed, will give a prescribed result (AI Bulletin)
- A list of steps to finish a task (NAIC Glossary for Regulators of InsurTech)
- A set of instructions that can be performed with or without a computer (NAIC Glossary for Regulators of InsurTech)

For example, the collection of steps to make a peanut butter and jelly sandwich could be considered as an algorithm. (From the NAIC Glossary for Regulators of InsurTech)

Artificial Intelligence (AI) - refers to a branch of computer science that uses data processing systems that perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement, or the capability of a device to perform functions that are normally associated with human intelligence such as reasoning, learning, and self-improvement. This definition considers machine learning to be a subset of artificial intelligence. (From the AI Bulletin)

Big data - refers to extremely large datasets analyzed computationally to infer laws (regressions, nonlinear relationships, and causal effects) to reveal relationships and dependencies or to perform predictions of outcomes and behaviors. (From CASTF's Predictive Model White Paper)

Machine Learning - Machine learning algorithms are a process or set of rules executed to solve an equation2, e.g., a life insurance underwriter uses a set of rules to place an individual insured in a particular risk category. The 'learning' part of machine learning means that those programs change how they process data over time, much as humans change how they process data by learning. Machine learning often falls into two groups: supervised or unsupervised.   The difference between the two is whether the program is directed to analyze patterns or is self-automated. (From the NAIC's Accelerated Underwriting in Life Insurance Educational Report)

Predictive Model - refers to the mining of historic data using algorithms and/or machine learning to identify patterns and predict outcomes that can be used to make or support the making of decisions. (From the AI Bulletin)