The development, validation, and implementation of machine learning (ML) models for use in healthcare requires a strong understanding of clinical needs, analytical methods, and systems engineering. A deep dive into the development of a ML model for predicting return to work of patients experiencing occupational injuries will be used to anchor a broad discussion on engineering ML for medicine. This discussion will cover the development of a dynamic prediction model using workers compensation claims data. Additionally, we will briefly cover issues surrounding ML model task framing, validation, and implementation.

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