

Neural Networks for prediction problems

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Neural Network (NN) algorithms for prediction

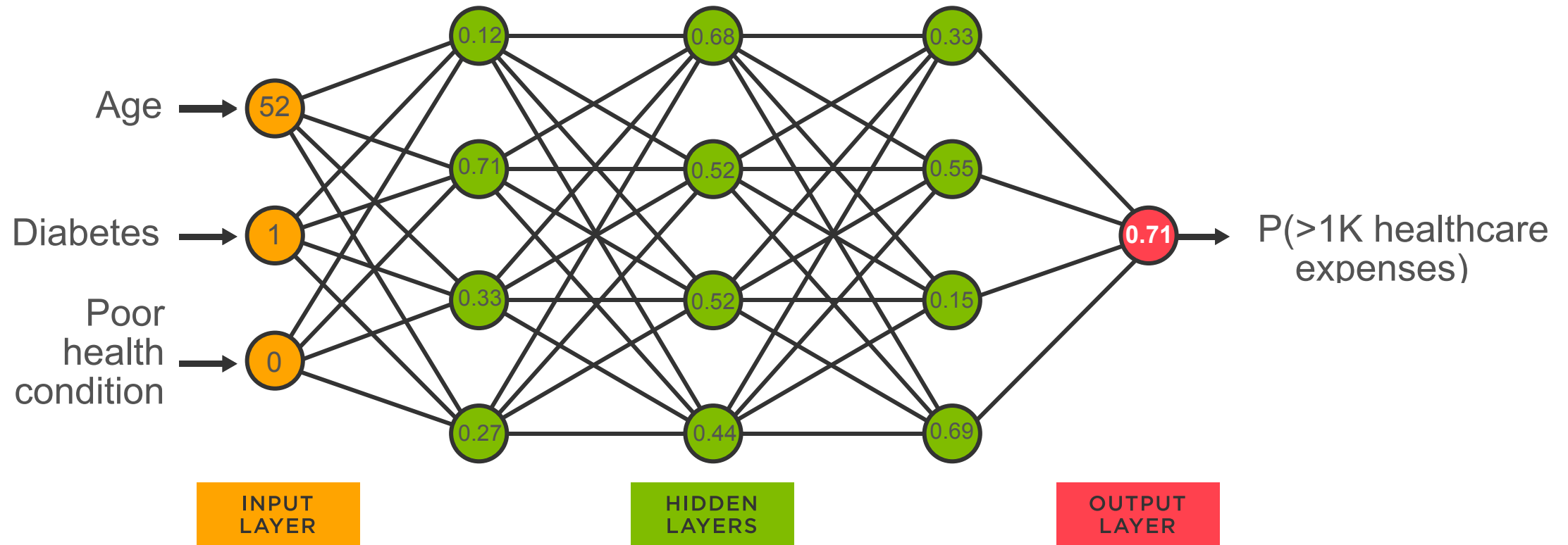


Image source: <https://www.spotfire.com/glossary/what-is-a-neural-network>

Using NN algorithms for prediction

- You need a LOT of data to be able to meaningfully train a NN algorithm
- Many NNs have *millions* of parameters (weights) to train
- NNs are *very* computationally expensive (often requiring GPUs)
- If you have basic tabular data with fewer than a few million observations, “classical” ML methods will likely do better than a NN
- NNs are great for **text** data and **image** data which involve very complex relationships
- NNs are less interpretable (more “black box”) than classic ML methods