# Prosthetics in Motion: a Comprehensive Review of Current Limb Interfaces

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The field of prosthetics interfacing is an ever evolving sub-field of research in medicine. Each design is weighed and compared on its value to cost to the patient both in the short and long term. Additional research moving forward in the field suggests that the progression to a fully articulated limb is growing nearer, but at current standards needs refinement before application. Brain-computer interfaces which hardline a connection between the prosthetic and the brain, peripheral nerve electrodes which connect local existing nerves to the prosthetic, and myoelectric cuff electrodes around the surface of the residual limb, each form the basic connections from a patient to their prosthesis, though each has its own challenges. Myoelectric cuffs remain the safest option due to their lower risk-to-benefit ratio at the current state, with the other methods approaching efficacy as research continues.