

Vacuum-assisted wound closure, also known as, negative pressure wound therapy, is a technique that uses a suction pump, tubing, and a dressing to remove excess exudate and promote the healing of wounds. This paper demonstrates the development process of a device that covers the potential holes in this market while illustrating the systematic approach taken during its development. The result was the creation of a functional prototype of a new and innovative NPWT device. This device differs from what's already available on the market by being highly portable and multifunctional. It can be used both with and without a canister depending on the type and size of the wound, it is very portable offering 3 different carrying options, and it is oriented for the patient, meaning it's simple and re-usable.