Weight Is Key in Design of Consumer MedTech

Jessica Irons, Marketing/Business Development Specialist, Sonoco Protective Solutions

When designing a medical device that is meant to be used directly by patients in their home, the designer has to keep in mind that the environment of a patient's home is likely going to be dramatically different compared to a medical facility. Doctor's offices, clinics, and hospital environments where medical devices have traditionally been used are much more controlled and there are highly trained professionals operating the equipment and have the right equipment to move/transport large, heavy, or bulky devices.

When you move to the patient home, the patient is responsible for maneuvering and operating the device. Because they don't have the same training/credentials to operate the device or the right equipment to transport the device, the device is much more susceptible to being dropped, bumped, and/or used improperly.

To combat these two issues, it is important that device designers think about reducing the weight of their designs as well as building as much resiliency and robustness into the design as possible. One way to do this is to use lighter-weight materials that are also strong, instead of a heavy metal chassis with lots of extra bolts and screws. Use molded EPP foam so you can eliminate both weight and complexity while adding strength and resiliency.

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