Reprocessing of Single Use Medical Devices

Authors

A dissertation by Dr. David LOCKE\textsuperscript{1}, summarized by Amelia SPINRAD

Key Words

Single—use; Medical Devices; Reprocessed Single-use

Abstract

The reuse single-use medical devices is a common practice in the medical field. Thousands of different single-use devices are reprocessed to cut costs and reduce medical waste. There are even regulations addressing this practice. In his dissertation for the University of Southern California regulatory sciences doctoral program, David Locke explored the views of end-users (mostly surgeons), laypersons, and regulatory professionals on the reuse of “invasive” single-use medical devices.

SUMMARY

It is difficult for surgeons to know if a device is repurposed. Only about 1/3 of surgeons who responded to a survey from Locke knew that single-use medical devices were repurposed and about 2/3 of them did not know if repurposed devices were being used at their place of work. Almost 90\% of these surgeons believe that single-use medical devices should only be used one-time, like their name implies. In fact, 100\% of surgeons surveyed have never received any training in the area of repurposing single-use devices.

Most regulatory professionals who responded to a survey from Locke would choose not to allow a repurposed single-use medical device in their procedure. The majority of regulatory professionals are most concerned with infection from improperly cleaned and/or sterilized devices, followed by inadequacy of device performance, followed by device breaks from the stress of reuse, leaving parts in the patient.

Almost 75\% of laypersons who responded to the survey from Locke would not choose a single-use device.

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for their procedure if given the choice. Over 75% of laypersons expect that a patient would be informed when a reprocessed single-use device would be used before implantation in a surgery.

A majority of surgeons has confidence that the FDA has the ability to ensure safety of reprocessed single-use medical devices; however, the majority of regulatory professionals and laypersons do not. So why are people so uncomfortable with reprocessing of single-use devices?

Would people feel more comfortable if the words single-use were taken out of the labeling of these devices and instead be labeled with an amount of years that the device would properly work? Will certain hospitals start marketing that they only use new single-use devices and charge higher prices? Will this marketing educate more laypersons about the reuse of single use devices and will the dissemination of information promote policy changes? Will insurance companies cover hospitals that only use new, single-use devices?