

InnAccel launches VAPCARE device for ventilated patients

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InnAccel, India's first product innovation platform with a diverse portfolio of globally patented medical technologies has launched VAPCARE, the world's first automated, and intelligent secretion clearance and oral hygiene management system for ventilated patients.

VAPCare is the first device of its kind in the world, and automates today's manual process of secretion clearance and oral cleansing performed by nurses. Secretion management and oral hygiene care is critical for reducing the risk of Ventilator-Associated Pneumonia (VAP), a type of lung infection that effects ICU patients on mechanical ventilators, and directly leads to over 250,000 deaths annually in India alone. Manual suctioning of secretions is time-consuming, and the shortage of well-trained nurses means that this protocol is not always followed. By automating this critical infection prevention processes, VAPCare improves protocol compliance and consistency, and is expected to drastically reduce VAP cases and VAP related deaths.

VAPCare has been developed by Coeo Labs, the critical care division of InnAccel Technologies. Speaking on the first-of-its-kind product, Nitesh Jangir, Lead Engineer, Coeo Labs, said, "People admitted to ICUs often contract VAP, an infection caused by the bacteria that collect in the lungs of a patient who has been on a ventilator for more than 48 hours. VAPCare addresses this issue by completely automating oral hygiene management. Through its patented technology platform, VAPCare intelligently clears secretions from 3 areas, and allows the doctor to customise the protocol depending on each patient's clinical needs."

"VAP is quite common among patients in critical care settings. Unfortunately, consistency of secretion management and oral hygiene protocols is often poor. In fact, this is a leading cause of VAP, resulting in 600K cases in India every year. We wanted to address this problem with VAPCare, which automatically removes saliva before it reaches the lungs and also pushes anti-microbial liquid into oral cavities. It increases ICU efficiency and eliminates multiple risk factors that are associated with the manual-suctioning process," commented, A Vijayarajan, CTO, InnAccel Technologies.

VAPCare was developed with support from BIRAC (Government of India), has been approved by the U.S. FDA, and has received a number of innovation awards in India and abroad. These include the Go Austria Winner 2017, the Silver Award in Mass Challenge Boston 2016, and a Top 16 Healthcare Technology Winner from the American College of Cardiology in 2015.

VAPCare has undergone extensive technical and clinical evaluation. A 30-patient clinical evaluation was recently completed with excellent results. The device not only improved patient safety by bringing down cases of mucosal injury, but also

increased the effectiveness of secretion clearance. Most importantly, no incidents of VAP were reported.

The device has been evaluated by some of India's top medical facilities including AIIMS, Delhi; NH, Bangalore and NIMS, Hyderabad. "VAPCare has a strong physiological basis to help decrease the incidence of VAP. We observed no VAP in the initial cases, and are excited to evaluate the technology further", stated Dr. Vimal Bhardwaj, NH Bangalore.