A SUPERIOR NEBULIZER ASSEMBLY DELIVERS MEDICATIONS AND DRAINS SECRETIONS WITHOUT BLENDING

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Invention Description:

The invention is a nebulizer assembly optimally configured to deliver medication to patients with respiratory impairment while simultaneously but separately draining airway secretions through the same chamber. The superior new design facilitates the dual function, maintaining an open channel through which the full, prescribed dose of aerosolized medication can flow unimpeded past the viscous secretions.

The inventors, experienced respiratory therapists at Thomas Jefferson University Hospital, have successfully tested their prototype, which outperformed the currently marketed assemblies. The dimensions of the new assembly fit standard connectors for easy replacement of the outdated units. Moreover, the flexible connectors of the new assemblies maintain the proper orientation for draining secretions and medicating while accommodating the patient’s position; this feature ensures the comfort of the patient.

Competitive Advantages:

The new assemblies will improve the delivery of nebulized medications to patients with severe respiratory impairment. Airway secretions are a bane to optimal nebulization. They can clog the tubing and mix with the medication, skewing the dosage. Current nebulizer assemblies do not adequately address these problems. The inventor group has designed and validated a novel assembly that effectively separates the nebulized medication from the mucus discharge in the same compartment.

Intellectual Property: A patent application is pending.

Business Opportunity: The technology is available for licensing

Follow-up:

For additional information, please contact Michael Caggiano at 1-215-955-6862 or at Michael.caggiano@jefferson.edu in the Office of Technology Transfer and Business Development (OTT) at Thomas Jefferson University, citing Jefferson docket number PEZ_TIF.001H.