

Help us make clogged feeding tubes a *Never Event*.



Enteral access devices (EADs) (i.e., feeding tubes) often become sluggish and/or clogged. With roughly 7M EADs used worldwide,¹ at an average clogging rate of 25%,² healthcare practitioners deal with over 1.7M clogs annually. We developed the TubeClear System to clear sluggish and clogged EADs while the EAD remains in the patient. Our goal is to make EAD clogging a *NEVER EVENT* so that optimum delivery rates of medication, nutrition and hydration are achieved, leading to improved patient outcomes. This will allow practitioners greater time to care for their patients.

Improve Patient Outcomes

EADs are analogues to peripherally inserted central catheters (PICC) as they both provide medication, nutrition and hydration to critical care patients. It is well documented that PICC patency is critical to patient outcomes;³ therefore, the TubeClear System was invented to similarly keep EADs patent to improve enteral patient outcomes.

Indicated for Use with NE, NG, G, J, and GJ EADs⁴

The TubeClear System consists of a reusable Control Box paired with a single use Clearing Stem. The Control Box and Clearing Stems are FDA Cleared for clearing occlusions / clogs in Feeding and Decompression Tubes in adult patients that have a Tube size of 6 to 18 Fr or have an AMT G-Jet®, Avanos MIC* or MIC-KEY* gastrojejunostomy (GJ) Tube size 14 to 22 Fr. It is the only active mechanical device to help keep EADs patent.

HealthCare Savings from the TubeClear System

Photo submitted by a hospital of an actual clog found in a patient's pulled EAD.

- + No x-ray or surgical intervention.
- + Reduce need to transport to have EAD replaced.
- Minimize negative patient outcomes associated with interruption to medication, nutrition and hydration delivery.
- + Healthcare practitioners can focus on other clinical care that may be reimbursable.

- "This is one of the best devices to come out in a long time to allow critical care nurses to do what they do best... care for their patients!"
 - + Marcia Belcher, MSN, BBA, RN, CCRN-CSC, CCNS
- "TubeClear has been a great tool.
 We used to spend exorbitant
 amounts of time trying to clear
 clogged tubes, we now can clear
 them in a minute or two. Easy,
 intuitive and functional the
 perfect combination."
- + Jim Mercer, RN, BSN

Key Advantages

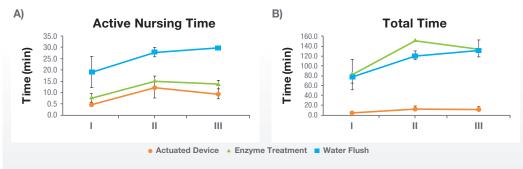
- + Works at bedside.
- + Medication, nutrition, hydration regimens delivered as prescribed.
- + Works on most clog types.
- + Works on most EAD types.
- + Competitive solutions are less than 50% effective.⁵
- + Reduces risk associated with invasive EAD replacement.
- + Billing codes B4034, B4035, and B4036 applicable.





The TubeClear System Works in Minutes

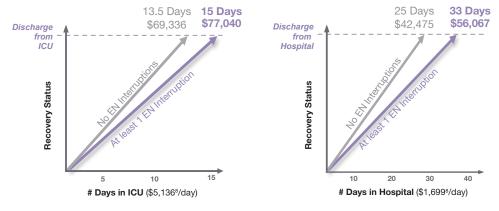
Clogged EADs (i.e., feeding tubes) are sometimes described as "shift killers" for healthcare practitioners who must spend significant time and effort to restore patency. The TubeClear System was found to require less active nursing time and significantly less total time for clearing clogs compared to enzyme treatment and flushing with water.⁵



Study conducted with 8 Fr, 42 inch nasogastric tubes. A) Total active nursing time spent in clog clearing attempt by treatment method. B) Total time (includes active nursing and dwell time) spent in clog clearing attempt by treatment method. Model Clogs: (1) 0.015 g wet coagulated protein + 0.053 g crushed medication; (III) 0.015 g dried coagulated protein + 0.053 g crushed medication; (III) 0.015 g dried coagulated protein + 0.080 g crushed medication;

Interruptions to Enteral Nutrition are Costly

A study found that at least one interruption to a surgical ICU patient's enteral nutrition increased their ICU length of stay by 1.5 days, and their hospital length of stay by 8 days.⁷ Published ICU patient pricing from an Ohio facility shows that this lengthened stay could **cost an additional \$7,704 in the ICU and \$13,592 in the hospital.**⁸



Visit TubeClear.com/ROI to discover how much the TubeClear System can save your facility.

Patient may experience a tickling sensation during use of the TubeClear System. Please review the Operator's Manual for full indications, contraindications, warnings, and cautions.

Fast Facts

Control Box

- + Control Box is a reusable device.
- + Model 101 runs on 110 - 240 V AC power.

Clearing Stems

- + Multiple Models for most NE, NJ, ND, NG, G, J, and GJ Tubes.
- + Stems are single use.
- + Rounded and flexible tips minimize risk of tube damage.
- + Stems are color-coded for easy selection.
- + Depth Limiter placement on Stems serve to limit insertion depth.
- + Labeling shows model number and selection criteria.
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 - 2. L.M. Lord, NP, MS, CNSN, "Maintaining Hydration and Tube Patency in Enteral Tube Feedings", *Safe Practices in Patient Care*, Saxe Communications, 2012.
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 - 5. Garrison, C. M., "Enteral Feeding Tube Clogging: What Are the Causes and What Are the Answers? A Bench Top Analysis." *Nutrition in Clinical Practice*, 2018; 33(1):147-150.
 - 6. M. Farrington, D. Bruene, M. Wagner, "Pain Management Prior to Nasogastric Tube Placement: Atomized Lidocaine", *ORL – Head* and Neck Nursing, 2015 Winter; 33(1): 8-16.
 - 7. Peev, M. P., Yeh, D. D., Quraishi, S. A., Osler, P., Chang, Y., Gillis, E., Albano, C. E., Darak, S. and Velmahos, G. C. Causes and Consequences of Interrupted Enteral Nutrition." *Journal of Parenteral and Enteral Nutrition*, 2015; 39: 21-27. doi:10.1177/0148607114526887
 - 8. Cleveland Clinic Patient Price Information List as of January 1, 2018. https://my.clevelandclinic.org/-/scassets/files/org/locations/price-lists/main-campus-hospital-patient-price-list.ashx









