

Norwalk Hospital Chooses Dräger for a Comprehensive Anesthesia Solution

At Norwalk Hospital, clinicians are reaping the benefits of a multi-tiered platform in one, user-friendly format.



When Eric Kitain, MD, of Norwalk Hospital in Norwalk, Connecticut sought to replace his department's anesthesia equipment, he had several ambitious safety, quality and financial goals to achieve. "We needed machines at various performance levels corresponding to the requirements of our in- and outpatient settings," says Dr. Kitain. "We also wanted some standardization among these machines so that if users were trained on one, they could use them all. To meet these needs, we looked for one vendor who could provide machines at multiple platform levels. We also knew that using a single vendor would allow us to negotiate a better service contract and a better, more cost-effective deal."

After a careful review, Dr. Kitain and his colleagues chose the Dräger suite of anesthesia workstations: Apollo® for the main ORs; Fabius GS® in the outpatient

rooms and obstetrical suites where general anesthesia is less often required; and Fabius Tiro®, a compact, feature-rich option for anesthesia in remote locations such as Endoscopy and Radiology (see sidebar). The three-tiered system allowed the hospital to get the level of care required while minimizing expenditure.

In addition, the choice equipped the hospital with a range of devices incorporating the latest ventilation and gas delivery technology - all with the same familiar user interface.

"This is a huge safety issue because it allows us to respond effectively during emergency and critical care situations," says Dr. Kitain. "Also, having a range of platforms enabled the hospital to purchase less costly machines with the same high operating standards for its lower-acuity outpatient areas."

About Norwalk Hospital

Norwalk Hospital is a not-for-profit, acute care, community teaching hospital in Fairfield County, Connecticut. Hospital services include oncology; an emergency and level-2 trauma care; in- and outpatient ambulatory surgery; diagnosis and treatment of sleep disorders; hyperbaric medicine; in- and outpatient psychiatric services; and in- and outpatient addiction rehabilitation.

FY 2007

Licensed Beds: 328

Emergency Department visits: 48,715

About Eric Kitain, MD

Eric Kitain, MD
Chairman, Dept. of Anesthesiology
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Eric Kitain, MD has been Chairman of Norwalk Hospital's Department of Anesthesiology since 2004. A graduate of Cornell University Medical College, Dr. Kitain completed a fellowship in cardiothoracic anesthesia at New York University. He is a Diplomate of the American Board of Anesthesiology and also serves as a national oral examiner for the board.

FEATURES FOR OPTIMAL PATIENT CARE

In making their choice, Dr. Kitain and his colleagues ultimately narrowed the field to include Dräger and a competitor. "Dräger worked with us to provide a total, flexible package that also included staff training, bioengineering training and equipment servicing," says Dr. Kitain.

In addition to an attractive purchase contract, Dräger machines offered numerous features that Norwalk anesthesia clinicians found beneficial in their practice. For example, they were impressed by the way the Dräger machines handled water vapor. In contrast, water condensation in the competitor's machines required manual drainage of the water trap. "Dräger's contain a heating element that reduces condensation," says Dr. Kitain. "This is not only more convenient, but supports safe use of the machine."

Other safety features were appreciated by the staff, notably, the way Dräger machines facilitated the exchange of the CO₂ absorber canisters. "They just pop out and pop in," says Dr. Kitain. "You can even replace the canister during a case without opening up the circuit - a considerable safety issue." And in terms of convenience, the Apollo® machines were unique in that they perform a fully automatic self-test for leaks and other potential problems, freeing users to complete other tasks. "This is something that we used to perform manually," says Dr. Kitain.

In addition to outstanding safety features, Norwalk clinicians were impressed by Dräger's advanced ventilation modes, which help them to deliver optimal patient care. For example, users may choose between pressure-controlled, volume-controlled and pressure support ventilation options. "These are particularly useful in administering newer forms of anesthesia,

such as those using a laryngeal mask airway," says Dr. Kitain. "The addition of pressure support ventilation allows us to keep CO₂ levels more stable and compatible with normal levels."

Other attractive clinical features include continuous flow volume loops that enable clinicians to gauge lung compliance and compensate for any changes they observe. "This helps us make the best possible ventilation decisions for high risk patients," says Dr. Kitain. "Considering the increasing numbers of older, obese, and chronically ill patients who are now surgical candidates, that's a considerable asset," he adds. Also helpful to clinicians is the Low Flow Wizard™ software to help them use anesthetic gases efficiently and avoid waste.

However, even the most advanced equipment is not useful if training and installation prove difficult. Dr. Kitain says that these critical processes went quickly, due in large part, to the common user interface. The hospital has also benefited from ongoing support from Dräger's staff. This was particularly critical when they experienced a higher-than-expected rate of self-test warnings during the initial period of use. "These machines are very sensitive, and sometimes pick up small things," says Dr. Kitain. "This is actually a positive point, because it shows us that they are working. Dräger stepped in and provided education regarding what these meant so that we were comfortable using the equipment in light of occasional warnings."

The equipment has proven to be reliable and also flexible enough to accommodate their information system requirements. According to Dr. Kitain, the machines have proven to be sturdy “workhorses” with very few problems. “When we do experience an issue, our bioengineering staff is trained to trouble-shoot it, which avoids machine down-time,” he says. Also, Norwalk has moved towards an electronic anesthesia record. Dr. Kitain and his staff have been pleased with Dräger's capability to integrate with their anesthesia information system. “Although this is not a unique feature, we feel that we're getting more data from the Dräger machines because they are computerized,” says Dr. Kitain. “This results in a more complete record.” The department also configured the workstations to the clinicians' specific needs using hardware mounting and extension support arms. “Options were readily available for any element we wanted,” says Dr. Kitain.

For Norwalk Hospital, Dräger's anesthesia solution has enhanced patient care with solid safety, efficiency and clinical features. The hospital's anesthesia staff have learned that they can rely upon this standardized fleet of machines to support their clinical environments and operate within the budgetary requirements of each practice setting. Additionally, a comprehensive staff training and maintenance plan helps to ensure that downtime is minimized and patient care is maximized. “When we set out to make a decision, we looked for one vendor who could provide everything we needed in a single contract, including multi-level machines in a single platform and bioengineering training,” says Dr. Kitain. “All of this and more was available through Dräger.”

THE PURCHASE DECISION

Like other hospital anesthesia departments, Norwalk Hospital looked for a solution combining high functionality, safety, flexibility and affordability. Practical concerns, such as the cost-effective training of clinicians and bioengineering staff were also important considerations.

Safety

Clinicians at Norwalk Hospital believe that having a standardized fleet of machines is an important safety issue. Training on one machine applies to all other current Dräger machines. This allows technicians to work confidently in any clinical area, and is critically important during emergency or critical patient care situations.

Quality of Care

Advanced ventilation modes offer clinicians options - particularly important when caring for high risk patients, such as the very young, elderly, chronically ill or obese.

Cost/Flexibility of Solution Options

In choosing an anesthesia solution, Norwalk Hospital looked for a range of devices to meet the needs of differing clinical settings and acuity levels. Dräger's diverse platforms allowed the hospital to reduce the cost of machines used in their lower-acuity outpatient settings.

In-house Maintenance, Reliability and Durability

As part of a comprehensive service contract, Dräger offered training to Norwalk Hospital's bioengineering staff. As a result, the hospital is capable of trouble-shooting many issues in-house, preventing equipment down-time.

Components of Norwalk Hospital's Total Anesthesia Solution

With a line of machines suited to different clinical environments, Dräger met Norwalk Hospital's acuity needs at a lower cost while maintaining high quality standards and a common user interface.

Apollo® Anesthesia Workstation

- Main Hospital Operating Rooms
Integrated anesthesia workstation with advanced ventilation and monitoring capabilities for a multitude of patient conditions and patient types.

Fabius GS®

- Hospital Outpatient Surgery Rooms and in holding area as an extra machine
- Obstetrics
Combines the latest ventilation and gas delivery technology with an intuitive, familiar interface. Fabius is an economical way to provide high quality anesthesia care while realizing cost and space saving.

Fabius Tiro®

- Ambulatory Surgery
- GI suite
- Radiology
- Various offsite locations requiring a mobile unit
Based on the same piston ventilator technology as the higher-level models for the same high-level performance with a compact design.

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