

Lowering mortality rates through our Biomedical Engineering Programs

Over the past 5 years, Issa Trust Foundation has worked to update hospitals with neonatal and pediatric ventilators within Jamaica to lower mortality rates. Med-Tech Support Services, Inc. is honored to be a part of an organization who works so tirelessly for the betterment of Jamaica's children.

Like any purchasing process, we must assess options prior to making a purchase. We must consider the equipment's ability to effectively perform and its continued durability. We strive to standardize equipment across the hospital system. Likewise, the ease of maintaining the equipment is important. And of course, a huge factor in purchasing any piece of equipment is its cost. Let's dive into these factors a bit further. As an example, we'll explain why our choice for neonatal and pediatric ventilators is the Puritan Bennett 840.

Performance and Maintenance

What is the maintenance schedule and costs for the machine? Can parts be sourced quickly to keep the machine running? How long will the manufacturer support the machine with service parts? The Puritan Bennett 840 ventilator is a reliable and durable product. The PB840 is still being manufactured new and is readily available through refurbishing vendors. Furthermore, parts are easy to obtain for maintenance and repair. Ease of obtaining parts and being able to source them within the country is incredibly important. Training for the hospital bio-medical technicians is paramount in purchasing and thus maintaining the new piece of equipment. Technicians need to be able to perform preventative maintenance and replace components that may break due to normal wear and tear. For example, to maintain the PB840, there is a computerized service mode test that a bio-med technician can perform. This test mode steps you through componentry and sensors within the machine that may need repairing.

Standardization of Equipment

Procuring standardized equipment that can be used throughout Jamaica's hospital systems is pivotal. It allows hospitals that Issa Trust is a part of to share staff, maintenance and patient disposables. Disposables are defined as one time use only patient materials. Common procedural usage and safeguards can aid in efficiency. Commonly trained doctors, nurses and maintenance staff can ease transitions when sharing between hospitals.

Cost

When determining a purchase, cost is often the first factor many of us use when choosing what to buy. Though a cheaper purchase price may be more desirable upfront, what sort of hidden costs could be involved with the purchase of this equipment? Sometimes an item purchased at a lower price can end up costing more to maintain, operate and repair. For example, proprietary disposables that can only be purchased from the manufacturer often cost more than universal disposables. Now the initial inexpensive cost of the machine has become less of a savings.

In summary, how does the Issa Trust Foundation determine which neonatal and pediatric ventilators to procure for the children of Jamaica? Performance, maintenance, standardization and cost are Issa Trust's determinants. However, the machine's ability to save the lives of Jamaica's future leaders, doctors, teachers, nurses, hospitality employees, store clerks, and manufacturers is our #1 goal.