In today’s healthcare environment, providers are increasingly concerned about both cost and quality of capital investments, and rightly so. Service and maintenance, while unavoidable, can be expensive.

How can state-of-the-art healthcare providers be sure their medical equipment is reliable and sustainable, and can produce the best possible outcomes now and in the future?

In general, manufacturer-provided (OEM) service is costlier and less responsive than ever before. Additionally, OEMs are quick to claim that only they can properly provide post-warranty service. In some instances, they may even bundle products and upgrades to seemingly hold you hostage to their service.

What can you do to evaluate alternatives?

What are the key issues you need to consider when selecting a service partner and how can you be sure you’re getting the best value?

Best value in service is frequently defined by reputation and response time from your service provider. But you’re not really buying service—you’re buying uptime and performance. After all, that’s how you will deliver the best patient care. You need assurance that your investment is maintained in the best condition possible and that you’re getting the best value possible.

First, let’s look at what you need to consider before you buy: quality, sustainability and total cost of ownership (TCO) throughout the life of your equipment.
QUALITY STANDARDS: What Healthcare Providers Need to Know

Quality outcomes depend on quality service. The International Organization for Standardization (ISO) has developed the ISO 9001 Quality Certification to help customers make informed decisions when quality is paramount. ISO 9001 is recognized the world over for its process-based approach and the commitment to continual improvement embodied in the standard. When selecting an independent service organization, choose from those that achieve this commitment to conscientious service management and have a strong customer focus and a process approach to continual improvement that rivals that of OEMs.

ISO 13485, an additional quality certification applicable specifically to the medical device industry, focuses on key quality aspects such as product safety, corrective and preventive action, and risk management. Sometimes only associated with manufacturers, independent firms can also be found with this additional level of service accountability and documentation.

For the best assurance possible, be sure your service team is ISO 9001 and ISO 13485 certified and that they have continual internal auditing processes with regular independent audits. Note that while an OEM with ISO 13485 certification would be actively focused on quality design and manufacturing of their medical devices, an independent service provider would be primarily focused on delivering quality service and customer satisfaction for the lifetime of the equipment.

SUSTAINABILITY: Performance for the Long Term

The medical device industry is highly complex and dynamic. Sustainable performance depends on up-to-date information and fresh technology. Before you purchase your medical device, investigate what service options are available to you and how each organization ensures proper training for service personnel. In many cases, it is no longer true that the OEM provides superior service. Ask how they measure customer satisfaction. Compare their Net Promoter Score (NPS). Many independent service providers have adopted rigorous quality management systems and formal training programs that meet or exceed OEM standards, delivering superior value with comparable uptime.

From a regulatory perspective, the OEM is ultimately responsible for safety and compliance related to machine design and labeling. They are held to the highest standard, and your service team should own that standard, as well, to ensure a total quality approach throughout the life of your equipment.

Replacement parts: quality, speed and value

TIP: Before you buy medical equipment or select a service provider, investigate your options for high-quality new and refurbished parts. Often, ISOs offer parts from the same sources the OEMs use, such as Dell and E2V. You can save 30% - 50% on parts over the life of your machine by obtaining parts from independent service organizations with strong quality processes in place.

Advanced skills: practical training and team development

TIP: Good service providers provide regular and ongoing training programs to hone skills and develop a team-based approach for seamless service. When you look for a top-notch service provider, ask about their team, training and talent development programs.

At times, throughout the lifespan of your equipment, you will need high quality, affordable replacement parts delivered quickly and safely to your door. Verify that your service team can get you the parts you need either Next Flight Out or Overnight door-to-door. Independents and OEMs can both provide high quality new and refurbished parts essential to sustain your equipment. Refurbished parts may be the best option in many cases, so ensure your service organization can test and certify refurbished parts for best value.

When buying used equipment, it’s nice to get it from the same company who will service it, establishing continuity and a seamless experience. Find independents that will sell, install and service for the entire lifecycle of your investment.
In addition to training and parts, software updates—both optional and mandatory—are an important part of your equipment lifecycle. Many medical devices use traditional, off-the-shelf software available to the general public, such as Windows, SQL, McAfee, Java and VNC. As such, these medical devices often require updates to maintain reliability and security. Sometimes, software versions can be maintained “as shipped” for the life of the machine, but if you know your options as a consumer and healthcare provider, you can make an informed decision. Check with your service provider before undertaking large-scale overhauls of your software systems to see if there are other paths toward sustainability. And remember, you are the customer. Don’t let the OEM artificially inflate the cost of upgrades.

**Total Cost of Ownership (TCO)**

Radiation oncology centers are under constant pressure to reduce expenses. In addition to the equipment’s purchase price, ongoing maintenance costs and software upgrades can easily get out of hand, straining your operating budget. Fortunately, you have several options—and some of them can bring significant savings over the life of your medical devices.

**TCO: Manage costs in three parts**

TIP: It may be tempting to negotiate price, service and upgrades as a bundled package, but you may end up paying more in the long run. Negotiate them separately to avoid locking yourself into a one-size-fits-all maintenance and upgrade plan.

For the greatest degree of flexibility and control, approach Total Cost of Ownership (TCO) in three parts: purchase price, ongoing maintenance and upgrades. It may seem attractive to bundle these things into one package, but it is usually advantageous over the long run to negotiate them separately. Doing so will allow you to pay for only the equipment and service you need and take a pass on those you don’t, as well as the flexibility to make adjustments down the road as your needs change.

**Warranty** – Your new or pre-owned medical device should have a warranty that covers parts failures, defects in design, manufacturing or installation. Ensure the warranty duration and coverage is appropriate to your situation and your equipment. In some cases, it may be necessary to complement the warranty coverage with additional shared-risk insurance or other service contracts. Check with your service provider for details and compare prices.

**Full-service contracts** – The most popular option, full-service contracts shift most of the risk to your service provider by covering you in the event of a catastrophic failure. Here you will find the most flexibility and control over your equipment’s TCO.

**Shared-risk contracts** – Another very good option for reducing TCO, shared risk contracts cover your most basic support needs. Usually, catastrophic failures will fall under time and materials costs if they do occur.

**Managing overtime**

TIP: Be sure to compare coverage hours as well as cost. Most service organizations apply an additional charge for overtime, but they may have different hours. You can save a lot by negotiating a contract with a shorter overtime window or one that includes after-hours preventive maintenance. One company may begin overtime charges at 7:00 PM while another begins overtime as late as 12:00 AM, significantly reducing the cost of service.

**Teamwork: can you have it both ways?**

TIP: Independent service providers usually offer contracts that include backup support from the OEM should it become necessary, making it possible to save on maintenance costs while still getting all the extended coverage you need. Likewise, in-house staff can supplement their support capabilities with a service contract for emergency backup. Teamwork offers you the best coverage at the best price.
**Time and materials (T&M)** – By forgoing a service contract, you can save money in the long term by assuming all the risk. This option may be more attractive when you can be confident in the equipment and have good historical performance information.

**In-house maintenance** – When you have a wide range of medical equipment that requires regular attention or a large number of devices, in-house maintenance is a good option. This support model has high fixed costs, which is more appropriate to larger departments with high uptime requirements. Note that in-house maintenance can be supplemented with any of the other service models for fast response coupled with the high expertise of a specialized service provider, providing you with the most complete coverage possible.

**What to Know When You Buy**

**Trade-in requirement** – Before replacing your existing medical device, you’ll want to know what options are available to maximize your equipment’s remaining value. Many OEMs offer a buy-back program that can provide a small discount on the new equipment, reducing the impact to capital budget. Often, the old equipment is simply scrapped because it does not fit into the OEM’s business model. Alternatively, the old equipment can be resold to an independent service provider for a more direct and immediate impact on cash flows, providing additional income during the installation and commissioning period. The resold equipment is refurbished and its life cycle is extended in emerging or special markets, keeping healthcare costs down and reducing waste.

**Software maintenance or relicense fees** – When purchasing refurbished equipment, be aware of software maintenance or relicense fees. These fees are a common administrative cost and a reasonable fee, perhaps as high as $15,000, can be expected. Recently, some OEMs have begun to charge relicense fees as high as $75,000 to discourage economical consumer alternatives. The result is shortened equipment lifespan, greater environmental impact and higher healthcare costs for all. In some cases, these fees can be punitive or anticompetitive. This behavior is rare, however, as it not only harms healthcare providers and their patients, it also damages the reputation of the OEM.

**Remote access and proactive monitoring** – Downtime is costly and can often threaten the quality of patient care. Consider the remote access capabilities of the equipment you buy and the service team you depend on for fast, quality service. Once the sole domain of OEMs, safe and secure remote access is now available from many independents for all healthcare providers. OnSite™ by OSI and Drop Zone™ by Dignatel are HIPAA- and cybersecurity-compliant alternatives with superior features at a reasonable price. Be sure to investigate these alternatives when you choose a service provider.

**Windows 7 or other software upgrades** – Used equipment may sometimes come configured with off-the-shelf software or operating systems such as Windows XP. Check with your IT professionals to ensure you can remain compliant with security and performance specifications. However, there are many options to enhance security and performance and maintain compliance without resorting to expensive, large-scale upgrades. Often, isolating computers using VLAN or a firewall appliance is sufficient and sustainable. If your equipment is serviced by an independent, the OEM may attempt to limit access to certain upgrades as a punitive tactic for discouraging your choice. If the upgrade does not include expanded features that pay for themselves, consult with your IT professionals and your service provider to consider alternative options for sustainability.

---

**High relicense fees? Know your options!**

If your OEM charges unusual relicense fees—perhaps offering to waive them if you agree to a long-term sale or service agreement—they might be punitive or anticompetitive. First, know that these fees are negotiable. If your negotiating power is limited, consider independent service and support or another OEM vendor.4
Q: Are independent service providers factory trained?

A: Most independent service providers have factory-trained field service staff, but the real consideration is how well the individual service rep is trained. Well-established service organizations will have their own training program to rival the OEM training. The amount and level of training between reps at the same company may vary. An ISO service rep will often rival or exceed the training level of the OEM rep.

Q: How can I save on parts while ensuring quality and compliance?

A: Independent service providers use factory-authorized parts and procedures just as the OEMs do, often sourcing parts from the same outlet the OEM purchases them from. ISO certification is an important consideration because it shows the service provider’s commitment to quality. There is no federal regulation that only OEM parts be used in servicing medical devices or that specifies that using non-OEM replacement parts compromise performance. Non-OEM parts can be equivalent and less expensive, reducing costs without compromising quality.

Q: Will using an independent service provider void the warranty on my medical device?

A: It is not legal for an OEM to deny or withhold warranty coverage based solely on the use of an independent service provider. Some independents may also offer warranties that are comparable to those provided by the OEM.

Q: Will using an independent service company make upgrades and software maintenance more difficult?

A: Compliance upgrades—that is, necessary upgrades to the software that supports your medical device—are mandatory and should be provided at no cost to you by the OEM, regardless of who is servicing your equipment. Discretionary upgrades have an associated cost and can either be purchased separately or built into a contract. Separately purchased upgrades offer you the flexibility to choose which upgrades you want.

Q: Is it true that OEM service is more expensive because it is better and you get what you pay for?

A: OEM service does cost more, but it is not necessarily better. It is a common perception that higher cost means higher quality, but with service providers, there are many other factors that drive prices and quality. Independents are often able to provide service with shorter response time and at lower cost because of their focus and their lower overhead demands.

Q: I’m buying new equipment and the OEM is offering to take my used equipment as a trade-in. What are my options?

A: A trade-in deal can knock a little bit off the price of your new equipment and the OEM can scrap or recycle the machine for you. At first, that may appear to be an attractive offer, just like trading in your old car to the dealer. However, your existing equipment still has value, especially in developing markets. It can be sold for immediate cash, which could go a long way toward offsetting the reduction in revenue while the new equipment is being installed, making the transition easier and more affordable. Consider contacting an independent service organization to see if they can help.
CUSTOMER CASE STUDY
Switching service providers can be a challenging experience sometimes, but it wasn’t for Carl R. Bogardus, Jr, MD, at Oklahoma University Stephenson Cancer Center in Oklahoma City. The Clinical Director of Radiation Oncology recalled the events that prompted him to look for a new service provider and the process of negotiating a new service agreement as simple and straightforward, and today he couldn’t be more pleased with his decision.

His longtime OEM service rep was retiring and he knew he had to take a good look at his options.

- Should he stay with the OEM and see what service rep they offered him?
- Look into the independent organizations with a good service rep in his area?
- Or should he hire an in-house technician?

First, he had to find out what was available to choose from. He started out by investigating his options and comparing them—keeping them all open. Knowledge is an advantage in negotiation, so no option was to be eliminated too soon. Still, he set the bar high: he needed a provider with “deep coverage”—one that could offer a reliable backup when the primary rep was unavailable. Was there another solid rep nearby and how would they work together as a team? Did the company offer a good remote support solution for the fastest response possible?

The next step was to get a sense of the value each service provider could offer. Dr. Bogardus knew that fast and reliable logistics support was essential if he wanted to offer the best patient experience in his region, so he investigated that first. He quickly discovered that he could get logistics support similar to what the OEM provided, but for a fraction of the cost.

Finally, he inquired about quality. What measures did each service provider take to ensure efficient, accurate and consistent quality service? He knew the OEM had a strong quality system in place, but he quickly discovered that independent service organizations had made great strides over the last decade in implementing certified quality programs such as ISO 9001 and ISO 13485. The independent service organizations had recently closed the gap. In some aspects, they even surpassed the OEMs by focusing specifically on service and logistics.

Dr. Bogardus was able to narrow down his list of candidates until he found an independent service organization that met all his needs. Today, he says he couldn’t be happier with them. They offer superior value all around, and negotiating the contract was simple and trouble-free.

Long ago, he could rely on an in-house service technician to handle the service on his specialized equipment, but he noticed that as his medical devices rapidly increased in complexity, OEM service was often the best option, even if the costs were rising at an even faster rate.

With his three mature radiation oncology machines and the new, highly complex and cutting edge fast-delivery machine, uptime seemed to be the most important factor and TCO ran a close second.

Oklahoma University Stephenson Cancer Center
Author’s Bio

Dan DuBeau is a consultant and solutions architect focused on the global medical device sector. As an alumnus of Siemens Medical Solutions, Varian Medical Systems, and MD Anderson Cancer Center, he has been deeply involved in radiation oncology service for more than 30 years. Dan specializes in providing cutting-edge remote support technologies and predictive analytics for the benefit of patients, hospitals and service providers worldwide.

SOURCES: