MASTERING FIELD SERVICE IN MEDICAL DEVICES
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INTRODUCTION

Medical device industry experts agree that for companies to stay competitive in the current healthcare environment, they must move beyond just the sale of products to grow and stay profitable. For many medical device companies, the next lucrative and untapped opportunity for so many companies is servicing products both in homes and in hospitals and other medical facilities. Through innovative service offerings and cost effective service agreements, service will be the ultimate battleground that decides which companies survive.

Yet, servicing medical devices in the field is unlike any other form of field service. For companies in other industries, equipment downtime means a loss of revenue and productivity, but in the medical device industry, often times human lives are at stake as well. In a high-risk environment, medical device service engineers must ensure complex machinery stays up and running, all while adhering to strict FDA regulations.

In an industry where competition continues to increase and margins are getting small for many companies, service is the bright spot many organizations are looking toward as they enter a new phase of growth and business innovation.

This report will help you navigate the new world of medical device field service with strategies, ideas and technologies to help your field service organization continue its growth and stay ahead of the competition.
Service Delivery Perfected

- Product Purchase
- Service Issue/Preventive Maintenance
- Work Order Creation & Dispatch
- Repair
- Inventory
- Close
- Analyze
- Market & Sell
Increased Regulation
Whether your company’s outlook is on new government regulations is positive or negative, the fact remains that new processes and procedures will need to be put into place.

What does this mean for service?
As the one of the few people in your organization that is at customer sites everyday, field service technicians are one of the only ways you can gather important customer information and log key information for compliance. Technicians will undoubtedly be a part of many new processes to comply with new regulations.

Healthcare Provider Consolidation
As more and more hospitals consolidate, there are less medical device purchasers and contracts to go around and hospitals are able to demand lower prices, ultimately squeezing margins.

What does this mean for service?
Service will be the ultimate differentiator and the long term profit driver. Hospitals will be looking for value-based service agreements than are based on delivering the best and most cost-effective patient outcomes.

Emerging Market Growth
As medical offerings in emerging markets continue to grow, so too will opportunities for medical device companies to expand into these countries.

What does this mean for service?
Field service organizations need to not only ensure that they are able to operate efficiently and provide consistent levels of service on a global level, but they also need to ensure service processes are aligned with the regulatory environments in these countries.

In this paper, we will guide you through each stage of the field service process for medical device field service with information, tips and data to help you transform your medical device field service organization into a modern, profitable and customer centric service provider that is ready to take on the challenges and opportunities in this new era of the medical device industry.
PRODUCT PURCHASE

The initial purchase of a complex medical device, as we all know, is just the beginning of a long and hopefully prosperous relationship between your company and your customer. For most medical device manufacturers, a service contract is a key element of the sale and often the most profitable one. As more and more of these contracts become based on uptime and performance instead of just resolution and SLAs, field service’s role in overall business success and profitability rides on their ability to execute. As we will see throughout the rest of this guide, today’s modern field service organization has the right technology, processes and people in place to make this a reality.

Build a detailed installed base

- Gather all installed base data upon initial sale. You’ll be very happy you did down the road.
- Ensure you know every warranty and entitlement on every part in the product that was sold to avoid warranty leakage in the future.
- Get all installed base and entitlement information into a cloud-based service system so call center agents and technicians can easily access it later.
- Make service a focus of the sale. Focusing too much on product will help your competitor win the business with service.

5-10% of service organizations increased product and service sales because they provided high quality product configuration data to sales people.

A 5% increase in contract attach rates can yield

A 9% increase in overall service revenue.
SERVICE ISSUE REPORTING

The simple process of companies being alerted of service issues has evolved significantly over the past decade. For medical device manufacturers, the time between a machine having a problem and the service organization learning about the problem can be the difference between life and death, and certainly a huge loss of revenue for the hospital or medical office. Modern medical device service organizations have powerful tools to ensure unplanned downtime stays low and service issues are reported immediately so a technician can get out to the site to solve the problem quickly.

Service Issue Reporting Best Practices:

- Empower technicians by connecting them to your device data. This way, they can act autonomously and fix problems that may be nearby without having to wait for dispatch.
- For certain errors or machine notifications, automate the creation of a work order when you know a technician needs to go on-site.
- If a customer does need to call, a call center agent has a better chance of helping solve the issue over the phone if they have the customer’s service history in front of them.

MOBILE CORNER

When equipped with a mobile device, a technician can be automatically alerted about a service issue no matter where he is. GPS on the can even help dispatchers or scheduling systems identify the closest qualified technician to perform the service.

$2,117

PET scanner downtime cost, per hour

$14,619

Cost per day of downtime of an MRI machine

SOURCE:
http://www.beckershospitalreview.com/hospital-management-administration/cost-cutter-or-value-killer-6-questions-hospitals-need-to-ask-for-equipment-service-cost-savings.html
PREVENTIVE MAINTENANCE

The holy grail of field service lies in preventive maintenance. If companies could specifically predict based on machine data when a medical device was going to fail, they could schedule preventive maintenance at just the right time to make sure unplanned downtime never happens. Not only does this approach decrease downtime, but also makes the operation more efficient. A “well-oiled machine” may never have any issues, and periods between preventive maintenance visits can be much longer and perhaps require one less visit by a technician than traditional static, calendar-based preventive maintenance visits. On a large scale, that can translate to big savings for your company.

Service Contracts of the Future

- Move toward data-based preventive maintenance schedules instead of calendar based.
- Shift your service contracts from break/fix and numbers of preventive maintenance visits to contracts that guarantee business outcomes, such as hours of peak performance per day, or uptime.
- Perform ongoing reviews of preventive maintenance checklists based on common service issues you notice in your service and machine performance data.

BIG DATA CORNER

Today’s leading service management systems help companies make sense of machine-based data. Companies can now schedule their preventive maintenance visits based on certain performance metrics that they track via machine data, eliminating unnecessary preventive maintenance trips to the customer site.

Medical device field service organizations have increased customer satisfaction by

15% with ServiceMax

SOURCE: ServiceMax Customer Success Survey, 2014
WORK ORDER CREATION & DISPATCH

The call center should always be the first point of contact for a customer to get their problem solved, because avoiding a truck roll can save an average of $1,000+ according to analyst firm TSIA. If a tech needs to go out, automating work order creation and dispatch is essential to an efficient operation. An advanced service system configured with your company’s workforce and installed base data will make entitlement and estimate checks a one-click effort. As for dispatching, companies can either employ real-time scheduling and optimization solutions or provide skills, parts, and geographic data to make a dispatcher’s job far simpler and straightforward.

Work Order and Dispatch Best Practices:

- Make sure dispatchers have the right information to know which technicians are where, what skills they possess, and what parts they have to help get work orders closed faster.
- Make it easy for technicians to access a full 360 degree view of the customer directly from the work order.
- Provide easy access to warranty information so agents and techs can provide an accurate estimate before performing work.

MOBILE CORNER

With a mobile device in-hand, technicians are alerted immediately when a new work order has been added to their calendar. No matter where they are, they can access the customer data and entitlement information in real-time, cutting down on administrative time and driving more revenue by eliminating warranty leakage.

#1 reason for unsuccessful first time fix: Not having right parts

SOURCE: Aberdeen Research

Medical device field service organizations have increased first time fix rates by 20% with ServiceMax

SOURCE: ServiceMax Customer Success Survey, 2014
REPAIR

Now it’s time to repair a problem. Your technicians are skilled and have usually seen the problems they need to fix several times. But what happens when a technician gets stuck? He’s alone, on an island. He doesn’t have a cubicle to peek over to ask advice from his neighbor. This is where social collaboration comes in. Collaboration tools today enable real-time communication throughout a company so technicians can get the answer to their questions quickly, even if they don’t know who exactly has the answer. And of course, don’t forget about more traditional knowledge management. We have come a long way since technicians had to carry around thousands of pages of manuals in a suitcase.

Social Adoption Tips:

- **Executive participation**: Make sure your VPs and executives are actively participating. This will make the tools seem far more valuable to technicians and managers.
- **Build a team of champions**: Gather a group of tech savvy people at the company that will kick start usage of social and power through the early days when very few people are using the tool.
- **Base a key process in the social tool**: put all new product manuals or service advisories into your social tool. Tactics like this ensure people will log on and get exposure to what’s happening in their feed.

MOBILE CORNER

Not only can technicians access social collaboration tools and video-chat from their mobile device, but they can carry all of the thousands of pages of product manuals with them on a tablet to every work order. The content is even searchable so they can get to the right information fast.

According to Frost & Sullivan, collaboration technology increases labor productivity by an average of 36%.

Social Collaboration is a game changer for my field service organization. Every technician has total access to the McKinley knowledge base on their iPad from anywhere, anytime.

Kevin Rusin
CFO, McKinley Equipment

SOURCE:
INVENTORY

We all know the inventory dilemma: too much inventory and you’re cutting into profits. Too little and you risk hurting your average-time-to-repair and first-time fix rates. So how do you find a balance? It all comes down to historical data and visibility. The more service and consumption data you have, the easier it is to predict how many replacements of what types of parts you will need. The impact of getting this right comes down to faster, more efficient service and of course, happier customers with functional equipment.

Seamless parts management

- Leverage service data and consumption trends to make decisions about inventory purchases and distribution.
- Look for ways to automate the inventory and parts process. It’s a numbers game, so a computer can often do it for you.
- Always keep in mind that an extra truck roll to a customer site costs both money and customer satisfaction, so include those significant factors in your inventory planning.

MOBILE CORNER

With a mobile device, technicians can indicate what parts they have used immediately after using them, which speeds up the process or ordering and replacing used inventory.

The top field service organizations report a 91% spare part fill rate

SOURCE: Aberdeen Research
WORK ORDER CLOSURE

Closing a work order for medical device technicians is unlike any other industry. Compliance and regulations require certain data gets captured every time, and luckily technology has made this far easier and more accurate than was ever possible with paper and spreadsheets. Some service systems today are even FDA validated out of the box, which means medical device companies can be up and running fast. And capturing signatures and information is not only easier that even before, but should an audit ever happen, gathering the right data is simple and fast.

Work order closure best practices:

- Integrate checklists into your work order closure process to guide the technician. If on a mobile device or laptop, set rules that prevent him from closing unless all tasks are done.
- Look for service systems that are FDA validated. This can give you peace of mind that you’re doing all the right things
- Ensure digital signature capture and finalized work performed documentation is sent immediately to the customer, preferably while the tech is still on-site

MOBILE CORNER

A mobile device like an iPad or iPhone make it easy to capture a digital signature while the technician is on-site. With built-in email capabilities, he can also send finalized documentation to the customer before he walks out the door.

Gartner predicts that by 2020, the majority of e-signatures will happen on mobile devices.

SOURCE:
ANALYZE

The most powerful feature of a service management system for managers and executives is the data. The right data presented in the right way can deliver insights that once seemed impossible for many service organizations. Track key metrics in real-time such as first-time fix rates and service revenue. Drill down into regional service teams to see who is performing well and where changes might need to be made. An accurate analysis of your service organization with real-time data from the field can help make some key decisions to improve the customer experience and drive more profitable customer relationships.

Tips for better data analysis:

- For good analysis, you need good data. Make sure your data entry processes by technicians and support staff are simple to ensure you’re getting the right information. Mobile devices are a great way to ensure techs enter accurate data quickly.
- Avoid “data paralysis” by focusing initially on the metrics that are most important for you. It’s ok to crawl first!
- Ensure your data is real-time and is informing decisions that help you change and adapt to your business and customers
- Once you have decided on your top key metrics, create a dashboard with all of them updating in real-time

BIG DATA CORNER

Now is a transformative time for the data industry. So many technologies exist on the market to derive insights from data. The key is the make sure your solution works for you: simple to use, clear data and insights with a focus on service, and answers the questions that you specifically have about your business.

A GE jet engine generates **1 terabyte** of data (1000 gigabytes) per flight

The volume of business data is growing by **59%** per year according to Gartner

SOURCE:
MARKET AND SELL

An often overlooked function within service organizations is marketing and selling your services. Field service organizations get so focused on serving customers that they may sometimes forget they are running a business unit too. The good news is that putting some focus on marketing and sales will put you ahead of most of your competition. Don’t be afraid to tell your prospect and customers about your great new service offerings. Show how you are improving the lives of your customers and beating the competition. Don’t be shy! And don’t be afraid of getting your technicians to sell in the field. No offense to sales, but customers trust service technicians far more often than salespeople.

Tips for better data analysis:

- Create data sheets, video and a webpage about the great services you offer.
- Start a customer reference program. Ask your top 5 happiest, friendliest, most well spoken customers if they will serve as a reference for your company in the sales process.
- Incentivize your technicians to sell while onsite. Whether it’s replacement parts, consumables, or more service, give them the motivation to sell and they will.
- Have your technicians report all competitor equipment at customer sites. Your marketing team will love you.

MANAGEMENT CORNER

Many service organizations now have their own services marketing resource in the marketing organization. If you don’t, make a case for how marketing can help the growth of your profitable service organization, and it’s likely they’ll be happy to help.

A professionally made video can cost as low as just $500 per minute of video¹

45% of manufacturers report that in 3 years more than 30% of their revenue will come from service²

SOURCE:
ServiceMax Powers Flawless Field Service in the Medical Device Industry
Mobile, Social and Cloud-based Complete Field Service

What does flawless field service look like?

1. **Complete Visibility**: For the first time, service teams are gaining deep visibility into the entire service delivery operation, and it’s changing the way they do business.

2. **A Full Suite**: Not only contract entitlements, scheduling & optimization, parts & reverse logistics, but also cutting-edge mobility, social collaboration, and real-time customer & partner communities.

3. **Cloud-Based**: Built on the proven Salesforce1 platform, customers get up and running fast in a low cost subscription model.

4. **Access Everywhere**: Mobile, anywhere access to ALL the pertinent information.

- **CONTRACTS**: Increase revenue by increasing contract renewals and preventing warranty leakage
- **SCHEDULING**: Minimize total cost of schedule without impacting customer satisfaction
- **PARTS**: Reduce inventory costs by minimizing parts leakage and write-offs
- **SOCIAL**: Ensure customer delight on every call and increase first time fix rates
- **COMMUNITIES**: Ensure transparency and control to build loyalty and drive service revenue
- **ANALYTICS**: Meet your profitability goals with insights on key operations metrics that drive the right decisions
- **MOBILE**: Anytime, anywhere access to critical information reduces errors and decreases repair time