

CASE STUDY

PREVENTIVE WORKSTATION FLEET MAINTENANCE SOLUTIONS FOR HOSPITALS & HEALTHCARE SYSTEMS



Executive Summary

Maintenance of mobile workstations used by nurses, physicians, and technicians is a major and ongoing challenge for hospitals —particularly at scale, when cart fleet sizes can number in the hundreds, or thousands. The following case study centers around a California-based hospital where the implementation of a more robust preventive maintenance (PM) schedule through TouchPoint Medical significantly improved operational efficiency, reduced IT helpdesk tickets, and enhanced patient care.

To address unpredictable outages, downtime and other service issues, the hospital transitioned to a scheduled quarterly PM regimen. This strategy consisted of on-site service visits by TouchPoint Medical's qualified technicians, who conducted thorough inspections of the entire fleet, diagnosed unreported issues, completed necessary repairs, and ensured each workstation on wheels (WOW) was updated to manufacturer specifications. Hospital administrators reported a measurable decrease in cart-related helpdesk tickets, quicker repair turnaround times, and an overall reduction in service interruptions and downtime. Looking ahead, TouchPoint Medical's introduction of WOW tracking tools will further improve cart management and address the common issue of "missing" carts. This case study underscores the importance of frequent and proactive maintenance in busy, changing, and growing healthcare settings to achieve more efficient resource allocation, greater staff morale, and improved patient satisfaction.

Challenge: Hospital Staff Faced with Unplanned Technical Issues with WOW Fleet

One of the largest hospital systems in Northern California, with over 850 [workstations on wheels \(WOWs\)](#) in circulation, has worked with TouchPoint Medical for years for their cart procurement, maintenance, and repairs. Before their most recent contract renewal, the hospital participated in a single yearly preventative maintenance (PM) schedule. However, throughout the year, heavy usage still lead to carts becoming unusable and backlogs of pending repair tickets. Depending on the issue and IT resource availability, carts could be down for days, or even weeks, before repairs were made.

At this hospital, a typical IT service ticket requiring diagnostics and repair followed this lifecycle:

1. Tickets were generated by staff to alert the IT department about problems with a WOW.
2. IT staff members located the cart and attempted to resolve the issue.
3. Simple repairs such as keyboard, mouse, monitor, and/or battery replacements were often made on the spot, sometimes without time or attention paid to other unreported issues such as missing hardware, cable management, infectious disease risk, etc.
4. Tickets were closed when the reported issues was resolved, typically without being fully inspected for other potential issues.
5. WOWs remained sidelined when repairs were beyond IT's capability, or when correct parts were not in stock.

The hospital reported that, although cart-related IT help desk tickets decreased substantially after each yearly PM, they would begin to increase as the next annual maintenance cycle approached.

Analysis: The Challenges Associated with WOW Maintenance

With rigorous use in healthcare settings, even the highest quality WOWs need routine maintenance, upgrades, and occasional repairs. Often, dedicated hospital [IT staff](#) must quickly step in to deal with WOW technical difficulties so that care teams are not diverted from patient interactions. However, scarce IT resources and limited capabilities mean this “rapid response” approach isn’t always reliable, practical, or even possible, and often only addresses immediate problems while bypassing proactive maintenance.

Hospitals and health systems are discovering that a better approach to WOW problem resolution is preventive in nature. A proactive approach begins with careful and standardized procurement of high-quality, ergonomic carts that are backed by regular, manufacturer-administered maintenance. In proactive management situations, hospitals of all sizes can benefit long after the initial equipment purchase by working with trusted vendors who will match them with service plan options that provide quick access to replacement parts, as well as skilled technicians who work closely with internal staff to keep carts functioning properly. Frequency is a key variable that must be considered. Although annual maintenance is common among busy hospitals with smaller IT departments, yearly care may not be sufficient to keep routine helpdesk requests low.

Solution: Adopting a More Robust PM Solution

To address the needs of the California-based hospital's WOW fleet and IT department, hospital administration worked with TouchPoint Medical to address organization-wide pain points and anticipate specific needs of staff members and departments. Transitioning the hospital to a quarterly PM schedule was recommended, and implemented, allowing TouchPoint Medical Professional Services to play an instrumental role in ensuring IT helpdesk tickets were kept to a minimum throughout the year and more importantly that heavily-used WOWs were subjected to regular inspection and proactive maintenance.

Today, TouchPoint Medical Professional Services schedules 6-10 skilled technicians to complete quarterly maintenance visits at the hospital. Each quarter, TouchPoint Medical service technicians visit the premises, correct unreported issues, resolve previously incomplete or temporary repairs, order certified replacement parts, and properly address any issues to ensure carts are back within manufacturer specifications before returning them to circulation. The team meets with internal IT staff members before preventative maintenance visits to develop a game plan. Meeting agenda items include a review of the last PM's exceptions, goals for the current PM visit, expected new cart integrations, end-of-life replacements, and any other potential issues.

With a quarterly vendor preventive maintenance program now in place, TouchPoint Medical technicians can better anticipate and manage service needs for all 850+ carts.

Outcomes: Enhanced Operational Efficiency and Patient Care and Patient Care

The overall reduction in “out-of-service” and “awaiting repair” statuses keeps WOWs available and in use. Under this new preventive fleet maintenance plan, TouchPoint Medical’s quarterly assistance also offers dedicated attention to the requirements of several hospital teams:

- The **IT department** can now count on out-of-the-box readiness, power supply stability, battery reliability/longevity, and priority access to upgrades.
- For **nurses**, who rely on the ability to personalize their carts for more ergonomic experiences, TouchPoint Medical Professional Services monitors adjustability features to ensure that normal wear and tear does not compromise staff’s ability to customize height and monitor viewing angles. Maintenance also checks that nurses can roll carts in their intended directions without excessive effort. TouchPoint Medical checks for defects that can occur with heavy use, such as bent bases, column issues, and loose or worn casters—all of which can impact a cart’s mobility.
- For **administrators**, TouchPoint Medical continues to offer regular improvement and serviceability recommendations based on budget requirements.

On-Call Maintenance Leads to Faster Repairs

TouchPoint Medical Professional Services also provides on-call preventive maintenance service to this California-based hospital between scheduled

visits. Regular, on-call interactions with hospital staff allow TouchPoint Medical to more accurately forecast part requirements and complete scheduled maintenance faster.

Thorough Inspections Help Ensure Safety

Repairs are completed with the utmost concern for safety, both from a mechanical/electrical standpoint, and with attention to infectious disease prevention. The hospital experiences decreased service call volume, and faster turnaround times when service needs do come up, keeping help desk ticket activity to a minimum.

Looking Ahead: A Roadmap for Future Enhancements to WOW Maintenance

With some stress associated with maintaining a large fleet of carts offloaded to TouchPoint Medical Professional Services, the hospital continues to look for ways to improve cart management. For example, on average, 50-70 of this hospital's WOWs "go missing" throughout the year, due in part to the facility's role as a teaching hospital. As a teaching hospital, students and doctors "borrow" carts when touring different patient areas across campus, then leave the carts in areas last visited.

To address the issue of missing carts, TouchPoint Medical Professional Services now reports the location of where each WOW was found during routine preventative maintenance. The hospital has also tasked TouchPoint Medical to develop and implement WOW geolocation tracking tools. Such tools are being designed to monitor the entire fleet across the hospital's ever-expanding campus.

Conclusion

Hospitals with limited IT resources and large fleets of mobile carts will benefit from frequent preventive maintenance, in particular after enlisting the help of manufacturer-authorized professional services technicians. As demonstrated by the example above, a tailored preventive maintenance program can significantly reduce helpdesk tickets, more quickly address issues that are outside the internal IT staff's scope of expertise, and more readily anticipate needs before they arise. Fewer service interruptions and better staff satisfaction translates in turn to better overall patient care.

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