

How to choose the right computer and device mounting solutions for health care

to benefit staff, patients and operations



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Integrating technology into health care



As health care organizations strive to capitalize on increased efficiencies and meet Meaningful Use goals, technology will increasingly become intrinsically linked to the health care landscape.

Facing new challenges and opportunities

When it comes to health care information technology (HIT), health care organizations are at the intersection of opportunity and challenge. Innovations in HIT drive unparalleled opportunities to improve caregiver performance and enhance patient care and engagement.¹ As noted by the U.S. Department of Health and Human Services, “Widespread use of health IT within the health care industry will improve the quality of health care, prevent medical errors, reduce health care costs, increase administrative efficiencies, decrease paperwork, and expand access to affordable health care.”² And as more

health care organizations of all types strive to capitalize on increased efficiencies and meet Meaningful Use goals, technology will increasingly become intrinsically linked to the health care landscape.^{3,4,5,6}

At the same time, health care organizations are challenged with ensuring their equipment functions in partnership with caregivers. Converting to digital technologies requires a transition in operations as nurses, physicians, technicians and other caregivers integrate electronic devices into their workflow. Driving more technology into day-to-day operations also creates risk for higher injury-related costs from increased musculoskeletal

disorders (MSDs), such as carpal tunnel and back strain, in a field that already ranks as one of the highest for job-related injuries.⁷

One of the fundamental components to ensuring a smooth transition to HIT—or improving on an existing HIT infrastructure—is the selection of computer and device mounting equipment. That’s because mounting equipment is more than just a fixture. It’s an investment in the bottom line. When properly aligned with operations, mounting solutions can markedly improve efficiencies, as well as the caregiver and patient experience. Proper selection and professional installation can also go far in reducing MSDs related to technology. By extension, this can add up to employee retention and greater market share.

Not all mounting solutions are equal, and some may even detract from the desired objectives. The first step is to thoroughly research organizational needs and available options to ensure the right solution is chosen for the right location. Selecting durable, flexible and easy-to-use mounting arms that work in partnership with staff is essential. The solutions should also bolster ergonomic objectives, reinforce communication and improve operational efficiencies. The second step is to work with manufacturers and installers who understand health care and who offer an outstanding level of service and support.

Comparing mounting arms to other options

Make the best choice

In the fast-paced environment of health care, there’s no time to waste and no room for error. The design of a facility, with its fixed and moveable components, can have a significant impact on the health and safety of employees, patients, and families.⁸ Given their ready access, durability and slim design, mounting arms are a reliable partner in a landscape that offers little predictability.

Why mounting arms provide the best solution:

Mounting arms simplify infection control

Unlike carts, which can spread contamination when they are rolled from room to room,

mounting arms are confined to one room and are easy to thoroughly disinfect.

Mounting arms are ready on demand

Mounting arms are conveniently located where they are used and are consistent with research that encourages bedside use of technology.⁹ No time is wasted searching for a cart that must then be rolled to the point of care. Further, arms do not require the constant upkeep to stay charged and operational, as carts and tablets do.

Mounting arms save space

Physical space is at a premium in the health care setting. Mounting arms use a minimum amount

of space and stow compactly against the wall or ceiling. Carts take up valuable real estate, can clog hallways and may even block emergency exits.¹⁰

Mounting arms can help reduce distractions

Mobile technology offers numerous benefits to health care staff. But mobile devices also enable caregivers to work on critical tasks away from the point of care, which can make them susceptible to distractions. Mounting arms reduce this tendency by encouraging charting at the point of care.

Mounting arms help protect patient information

Tablets can be misplaced, putting patient information at risk. Mounting arms are securely fastened to the wall or ceiling, eliminating concern about physical loss and conforming to HIPAA regulations. Perception of security is also an important factor in patient care. A recent survey found that when patients do not trust that health care providers have reasonable security protections in place for EHRs, they are almost 5 times more likely to withhold information from their caregiver.¹

Far from being just a piece of equipment, mounting solutions affect everything from workflow to technology adoption rates to patient satisfaction. When mounting arms are appropriately selected and installed, they are dependable solutions that have a positive influence on productivity, health and safety.



Mounting arms are conveniently located where they are used and are consistent with research that encourages bedside use of technology.

Choosing a mounting solutions company

Ask the right questions

Computer mounting solutions are a critical component of HIT infrastructure. To get the most from this investment, the mounting solutions must be demonstrably reliable, durable and backed by prompt attention to service requests. This begins with selecting solutions providers who understand health care—both its operations and its challenges. They should offer solutions, not products, and recognize that mounting arms are not just a tool, but an extension of patient care.

Consider these questions when selecting a mounting solutions provider:

Does the company offer a broad selection of mounting solutions and the capability of providing custom mounts?

Facilities use a wide variety of computers and devices that require unique mounting solutions. A solutions provider should offer

many mount options to meet the specific needs of distinct locations. Ideally, the solutions provider should also be able to customize mounts for specialized situations.

Is the equipment manufactured in the United States?

This is not just a point of pride. Quality products and prompt follow up are crucial to minimizing interruptions to operations if an issue arises.

Made in America means:

- Health care personnel and ergonomists are able to consult directly with the manufacturer.
- Replacement parts and custom mounts are readily available on short notice.
- Quality that is unmatched by overseas products.
- The company abides by strict regulations to prevent pollution and environmental abuse.
- The company upholds standards for safe working conditions.
- Clients receive in-person service and reliable customer support.

Products that are manufactured in America eliminate time lost waiting for components to be shipped from overseas, allowing for a quick turn-around on service calls, repairs and replacements.

Does the company provide a site assessment at no charge?

A cookie cutter approach to mounting solutions does not address the unique needs of different health care organizations, or the unique needs within each department. A thorough site survey conducted by professionals who understand health care will ensure the right equipment is selected for the right location. This will help ensure that the technology becomes a supporting partner, rather than a distraction, in patient care.

The assessment should include:

- Evaluating the entire facility room by room.
- Determining what fits into the budget.
- Determining with every customer the best possible solution for each room.

Be sure to include all the key players at this critical step. The site assessment should include consultation with staff ergonomists and the directors of IT, infection control, facilities and the departments for which the mounting solutions will be used.

Does the company offer a product trial period?

The smart investment is one that has been tested before it is fully committed. The only way to ensure a mounting solution will meet the needs of staff is to try it out.

This product trial period should include:

- Installing the product and providing an evaluation period for caregivers to use the product.
- Monitoring, evaluating and verifying that the product is appropriate for the application.
- Determining problem areas and correcting them.
- Removing or exchanging the product at no charge if the customer is not satisfied.

Making an investment in equipment only to find that it does not support caregivers or operational needs is a costly endeavor. A trial period helps ensure that the right solutions are selected the first time.

Does the company provide professional installation and a second evaluation?

Making a sound investment doesn't end with choosing a mounting arm. It also includes proper installation by

professionals. Equipment that isn't properly installed could negate all of the up-front planning work to find a solution that works for staff.

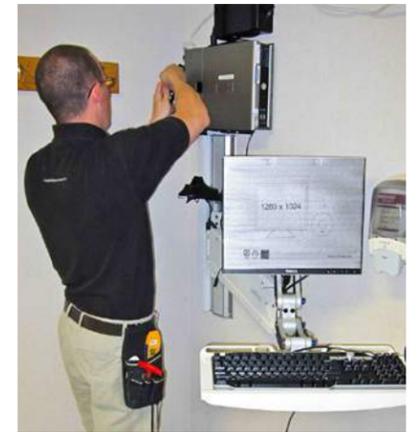
The installation and evaluation process should include:

- Ensuring that all arms are professionally installed and properly adjusted.
- Evaluating every room for correct components on arms (monitors, CPUs, keyboards).
- Checking arm function and appropriateness for use.

Working with a professional installation team also makes smarter use of human capital. Using an installation team means IT and maintenance staff will not be pulled away from their day-to-day duties to install and troubleshoot mounting equipment.

Does the company stand behind the product with policies that support their customers?

Malfunctioning equipment and poor response equate to lost time and costly service interruptions.



Equipment that isn't properly installed could negate all of the up-front planning work to find a solution that works for staff.

Does the company provide a solid warranty, robust maintenance program and replacement policy?

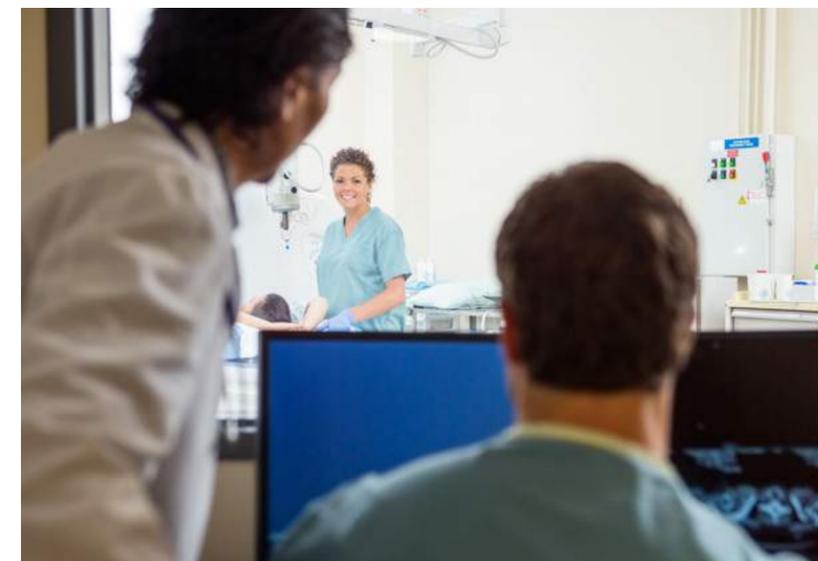
This should include:

- Warranty protection for 5 years or more.
- Fast response time for repairs to ensure minimal down time.
- Regularly evaluating every arm in the facility.
- Checking every screw in each arm.
- Adjusting and upgrading articulating arms.
- Performing necessary repairs or replacements.
- Restoring mounts to function like brand new installs.

Mounting solutions are a significant investment in operations. In return, they should easily stand up to years of daily use in a demanding environment. The only way to guarantee this is to work with manufacturers and installers who agree with this philosophy. Set high expectations and vet potential solutions providers based on their ability to deliver high quality products and service.



Mounting arms are not just a tool, but an extension of patient care.



Professionals who understand health care will ensure the right equipment is selected for the right place so that technology becomes a supporting partner in patient care.

Selecting computer and device mounts

Match caregiver needs to hardware functionality

Every department will have unique mounting equipment needs which should be carefully addressed by the solutions provider. Multiple mount options and custom configurations should be considered to determine the best fit for staff. Even so, there are universal traits that every solution should incorporate.

Mounting solutions should be:

- Unobtrusive and flexible, allowing for a natural transition between face-to-face contact and technology.
- Readily accessible to staff.
- Easy to clean to prevent nosocomial infection.¹¹
- Able to boost efficiencies by enhancing workflow and protecting against MSDs.
- Simple to adjust and effortless to use so caregivers can focus on the patient, rather than struggle with the equipment.

Look for these qualities when selecting mounting solutions:

Solutions that are durable

The health care environment is highly demanding. Computer and medical device mounts must



Equipment that requires only a small footprint and stows away compactly frees up desks and countertops, creates more space for visitors in patient rooms, and gives caregivers more area to work with patients.

withstand constant use and frequent adjusting 24 hours a day, 7 days a week. They also need to hold up to rigorous cleaning.¹¹

Look for:

- Durable, powder-coated finishes that resist the wear and tear of heavy use and daily disinfecting.
- Strong yet lightweight billeted aluminum that delivers unmatched 24x7 performance.
- Heavy-duty internal and external components that provide years of uninterrupted service.
- Rotational stops that protect computer equipment and the facility from damage.
- Built-by-hand production to ensure unsurpassed quality, workmanship and dependability.
- Internal cable management systems that protect wires, simplify cleaning and create a neater appearance.

Solutions that support efficiency of care

Positioning the caregiver, patient and computer in close proximity has proven to be the most effective way to document. The caregiver should be able to easily make eye contact with the patient. Immediate accessibility of real-time information at the point of care can also reduce errors and create opportunities to involve patients in their care. To achieve this, select mounting solutions that maximize adjustability.

Look for:

- Mounting arms that reach well into the room and stow compactly when not in use.
- Mounts that allow independent rotation of the monitor to facilitate patient viewing.
- Mounts that provide maximum rotation, tilt and height adjustment of all components.

Ease of use is key—caregivers will be more likely to use solutions that are intuitive and easy to adjust.

Solutions with correct ergonomics that protect staff from repetitive stress injuries

Caregivers experience MSDs at a rate that is seven times the national average for all occupations.¹¹ According to the Occupational Safety and Health Administration, work-related MSDs are a leading cause of lost workday injury and illness.¹² Choosing mounting solutions that fit the task to the caregiver can help reduce injuries while demonstrating that physical health is a top priority for the organization.¹³

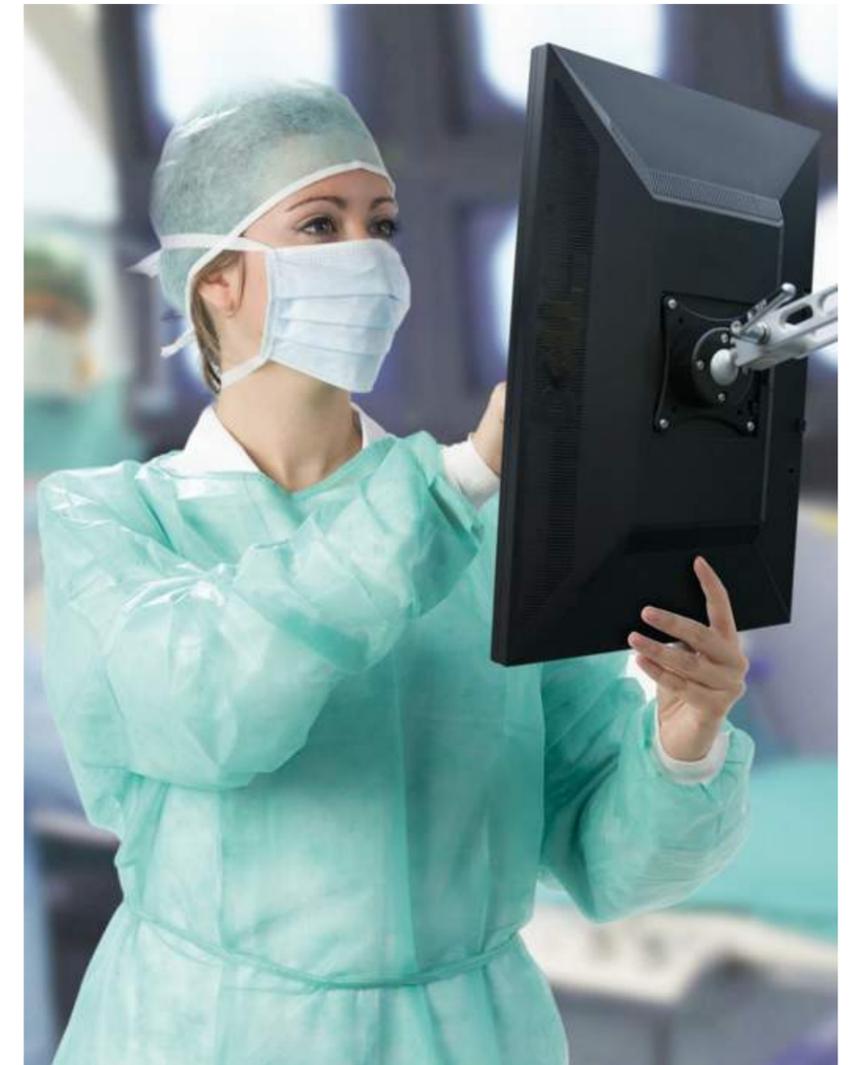
Look for:

Mounting arms that adjust to fit the caregiver

- Fully adjustable mounts allow caregivers of different heights to work in comfort—for example, a mount that adjusts easily and quickly for a 5' nurse and a 6'6" doctor.
- Sit-stand workstations enhance employee health, reduce fatigue and eliminate "sitting disease."¹⁴
- Sit-stand workstations offer an all-in-one solution for actions that require standing (such as quick patient checks) and those that require sitting (such as charting).

Monitors that adjust up and down, forward and back, tilt and rotate

- Properly positioned monitors reduce neck and back strain.
- Monitors that tilt and swivel reduce screen glare, make viewing easier and reduce neck and eye strain.
- Monitors that rotate into



Support sound ergonomics, improve provider performance and enhance patient care by selecting the right mounting solutions for the right locations.

portrait position make it easier to view vertical data and x-rays.

Adjustable keyboards that move up and down, and provide positive, negative, neutral tilt

- Keyboards that adjust easily for individual ergonomic comfort relieve hand and arm strain.
- Keyboards that quickly and securely lock into position eliminate time wasted on adjusting imprecise equipment.

- Independent adjustability of components is vital to support the ergonomic needs of each individual caregiver.

Solutions that save space

Equipment that requires a small footprint and stows away compactly frees up desks and countertops, creates more space for visitors in patient rooms, and gives caregivers more area to work with patients.

continued

Look for:

- Slim wall track mounts that hold complete workstations, including the monitor (or dual monitors), keyboard, medical devices and CPUs. They provide long reach into the room yet stow compactly.
- Ceiling mounts that hold monitors and can be pulled down easily from the ceiling and pushed up and out of the way when not needed.
- Undercabinet and in-cabinet mounts that turn unused space into productive space.
- Wall mounts that use only a few inches of space yet can hold a monitor (or dual monitors), keyboard and service tray.
- Desk mounts that sit atop desk pucks, freeing up the entire desk or countertop.
- Pole mounts that clamp to a pole, requiring no desk space.

Strategically designed, space-saving mounts improve efficiency and contribute to staff satisfaction by maximizing the area caregivers

have to do their work. Mounts also minimize visual clutter—enhancing patient perceptions about the quality of care they receive.

Solutions that are visually attractive

Aesthetics are an important aspect of a facility’s appeal to patients, and that same design sensibility needs to be kept in mind when selecting a device mounting system. Visual harmony reinforces a perception of organization and cleanliness, factors that affect both patient and caregiver satisfaction. As noted in a study on patient and staff satisfaction in pediatric facilities, “Facility aesthetics and work environment were found to be associated with higher satisfaction and better relationships among nurses.”⁹

Look for:

- Streamlined design and complementing colors to reduce visual clutter.
- A range of color options to coordinate mounting solutions with existing technology and facility décor.



- Mounting arms that keep cables neat and tidy to promote a sense of orderliness.

Choosing an aesthetically pleasing mounting solution enhances the facility while allowing the technology to maintain a low visual profile.

Selecting the right mounting solution takes time and research. It’s not a decision to be made overnight. Making the wrong choice can drive up costs through expensive reinstalls, service interruptions and low staff adoption. Solutions should be matched to long-term objectives and goals, not just in terms of operational and safety needs—such as improved ergonomics—but also in terms of service delivery.

Working with a solutions provider shouldn’t end with the purchase of equipment; it should be a partnership over the lifetime of the equipment. A thoughtful approach to the selection process will help ensure the right decision is made the first time in an investment that should support organizational goals and patient care for years to come.



Solutions should be matched to long-term objectives and goals, not just in terms of operational and safety needs—such as improved ergonomics—but also in terms of service delivery.

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