

# The Ultimate Guide to Sharing Medical Equipment Within a Hospital or Health System

How healthcare leaders can tap into the sharing economy to get physicians the equipment they need, faster and at a lower cost

## Introduction

Medical equipment, and what's available within the four walls of a given hospital, has long been a constraint for hospital leaders seeking to increase case volume, recruit physicians, and improve patient outcomes by utilizing the newest medical technology. Equipment sharing is the process of aggregating case volume from multiple providers and moving resources between hospitals to meet their equipment needs.

Sharing medical equipment can help hospitals to decrease redundant purchases and enable providers to access resources that would typically not be purchased for their facility alone.

### An equipment sharing program can be used to:

- ✓ Make equipment available for service line expansions into new hospitals
- ✓ Recruit new doctors without the added expense of purchasing equipment
- ✓ Fulfill provider requests without investing valuable capital dollars
- ✓ Systematically track how often a provider uses a shared piece of equipment to evaluate whether case volume exists to buy a dedicated unit
- ✓ Reduce rental expenses, while simultaneously increasing the utilization of owned equipment
- ✓ Decrease the overall costs around ownership, including maintenance, storage, and servicing

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## What is an equipment sharing program?

Today, hospitals are limited to the capital expense budgets provisioned to their facility by divisional or national leadership. Sharing can help stretch those dollars, because a portion of equipment needs can be met by using resources that are available at other hospitals within the network. Additionally, sharing can help defray the cost of purchasing a new unit, because several providers are contributing case volume.

To begin the program, there is a lending facility, which typically owns the equipment, and a borrowing facility, which uses the lender's equipment at their facility, either for an individual case or on a regular rotation. As the program grows, hospitals can collaboratively purchase equipment, decreasing redundant inventory and the overall cost to deliver care. This approach to equipment management enables hospitals to improve operating margin by equipping providers at significantly lower costs. At the same time, physicians gain access to new equipment types that have the potential to improve patient outcomes and drive additional case volume.

## Value of equipment sharing

The most common use cases for equipment sharing are:



### Physician recruitment efforts

One of the biggest challenges in recruiting doctors is ensuring that specialized equipment is available for their use. Equipment sharing can provide those physicians with access to existing equipment, without needing to purchase a dedicated unit. If the hospital does decide to buy new equipment for a physician, the cost of this asset can be defrayed by making it available to multiple hospitals within the network, who also want to access this resource.



### Equipping outpatient clinics and/or ambulatory surgery centers

To attract new patients and provide community-based healthcare services, many hospitals are opening ambulatory surgery centers (ASCs) or affiliated outpatient clinics. These ASCs and outpatient clinics can benefit from sharing equipment as they typically operate on lower margins with a "hub and spoke" approach. In this approach, diagnosis and specialty treatments are conducted onsite, with higher acute procedures being referred to a main medical center. ASCs and outpatient clinics can expand the services they offer with shared equipment.



### Hospitals seeking to expand into new service lines

Hospitals will often refer patients to another in-network facility if they do not offer a specific procedure or service line. This limits their ability to maximize their case volume, especially if they have a sizeable number of referrals within a single specialty. Hospitals can expand their scope of patient services, and the procedures that can be performed by their physicians, by borrowing equipment from the network.



### Providing multiple facilities with access to robotic surgical equipment

Patients are increasingly seeking care at hospitals that offer minimally invasive surgeries with robotic surgical equipment. Due to the cost of this equipment, and the need for specialized training on its use, the number of facilities that have access to this equipment is limited. With sharing, hospitals can advertise robotic surgical equipment to acquire new patients, and doctors have the option to leverage this equipment in their practice.



### Reducing rental expenses

Hospitals will rent equipment if they need coverage due to owned equipment being down for maintenance, if equipment is double booked, or to handle a surge in case volume. Sharing equipment can be a substitute for renting equipment, as most hospitals have backup equipment with lower utilization that can be borrowed, even with short notice.



### Emergencies where equipment is made unavailable

Flooding, fires, or poor storage are all scenarios where the viability of equipment can be impacted. If equipment goes down due to any such emergency, borrowing equipment from sister facilities can ensure that cases are not delayed, and expensive rentals required.

# How to select equipment for sharing

Lasers, surgical navigation systems, and specialty tables are the most commonly shared equipment. Traditionally, health systems sharing equipment do so among service lines that have overlapping equipment needs and are driving a large portion of their case volume. These service lines include: orthopedics, endoscopy, otolaryngology (head and neck), radiology, urology, and gynecology. Whether beginning by sharing a single piece of equipment, or initiating sharing across an entire service line, this guide can help a hospital to get started:

## Recommendations for selecting equipment for sharing

### Begin by tracking equipment utilization

Industry statistics peg average equipment utilization at 42%, with assets sitting idle for more than half of their usable life. Utilization data can confirm actual versus perceived equipment utilization, so hospital leadership can determine the untapped economic potential of their assets and prioritize sharing opportunities.

### What are the most common capital expense requests?

Health system leaders should review purchase requests regionally, from hospitals that are within 200 miles from one another. With this list of requests, sharing existing units with excess capacity can help address equipment needs at a significantly lower cost. If case volume doesn't warrant a new purchase for a single provider, collaborative purchases, where a single piece of equipment is purchased and shared, can help fulfill equipment needs.

### What is the revenue potential or bundled payment for the procedure for which equipment is being requested?

Spine or orthopedic surgical procedures are typically more complicated clinical events, and the reimbursement rates correspondingly higher. With value-based payment programs, ensuring a consistent delivery model with reliably low administrative costs is an important part of mitigating risk. Sharing equipment can help lower the costs of care episodes with payment bundles.

### What are the most common equipment rentals?

Sharing can help decrease the number of equipment rentals because nurses and schedulers get into the habit of looking first to the network, and what is owned by the system, before seeking rentals.

### Is there an opportunity to expand a service line by making new equipment available to providers?

If a hospital doesn't have equipment to perform a case, that procedure will be referred to another hospital in-network. Hospitals can recapture these patient cases at their facility by sharing equipment.

## Sharing within a single hospital or medical campus

Sharing within a single facility, between departments, or in a medical campus, can help standardize and improve visibility into how equipment is distributed. Sharing is usually already occurring within these settings. However, insight into who is borrowing the equipment, where it's located, protocol for safe moving, and who is obligated to return it - is not information that is reliably available. Developing a sharing program can help to distribute equipment strategically between floors and departments and collect data that helps to improve operational efficiency and patient throughput.

## Six questions to determine if equipment can be moved

Most equipment within the perioperative suite can be shared, regardless of its sensitivity. However, transporting sensitive and expensive equipment is inherently risky. Minimizing that risk responsibly and consistently is critical to a successful sharing initiative. That begins by determining which equipment is the easiest to share relative to the value and anticipated cost savings. These questions can help you determine the best equipment targets for sharing, based on their ease of movement.

1. What is the size and weight of the equipment?
2. Does the equipment have wheels?
3. How susceptible is the equipment to damage from movement and/or vibration?
4. Does the equipment require calibration when moved?
5. Does equipment contain personal healthcare information on the device?
6. Does the equipment contain any hazardous or volatile substances (e.g. nuclear material that cannot be moved without additional paperwork)?

## The process for safely moving medical equipment

These seven steps will enable for the safe transportation and setup of equipment when being shared between facilities.

### ● **Step 1: Preparing equipment to be moved**

Before a piece of equipment is signed out of an operating room and secured in a truck for transportation to another facility, the mover must evaluate each asset's movability by taking note of attachments and peripherals, and any other presenting factors such as equipment positioning that could be adversely affected during transport.

### ● **Step 2: Third-party movability analysis**

An independent third-party biomedical engineering company evaluates each piece of equipment to

determine the types of risks associated with moving individual pieces and categories of equipment. This independent analysis identifies issues such as hazardous materials (e.g. radioactive material in imaging equipment), applicable regulations about moving or transferring equipment, equipment susceptible to retaining personal healthcare information, and physical sensitivity (e.g. surgical microscopes requiring calibration). Not every piece of equipment should be shared, and this analysis is critical in surfacing any risks that might exist.

### • **Step 3: Determining what equipment needs specialized crating**

Certain categories of equipment are well suited to custom designed, reusable crating solutions. Crate use eliminates variability in packaging, which reduces the likelihood of damage due to a piece of equipment being packed or secured incorrectly. Frequently shared pieces can be transported easily and safely, with minimal risk, despite a high volume of moves. Surgical lasers are an example of an equipment category for which wheeled and padded crates are especially effective.

### • **Step 4: Training and implementation within each facility**

To get started, each facility must define the set of sharable equipment, determine exchange points, and assign specific equipment "owners", who will receive notifications each time a piece of equipment is reserved by another facility. Hospitals record facility information such as: access points during and after opening hours, locations of critical functions (e.g. sterile process and biomed), and planned travel paths within and between buildings on a campus. Personnel that must be trained include biomedics, OR nurses, schedulers and the OR director. Most of these individuals will not be involved in the logistics or day-to-day operating of sharing equipment, but it is critical to ensure they understand the protocols.

### • **Step 5: Inventory tagging**

During initial implementation at a new facility, and periodically thereafter, a physical inventory of the facility's sharable surgical assets must be maintained. Cohealo photographs and physically tags each piece of equipment with a 3D barcode tag and records serial number, facility asset tag number, and other identifying features of the specific asset. To begin this process, Cohealo uses any pre-existing inventory records (e.g. from clintech, finance, supply chain, or other responsible entities). Because surgical assets have a finite life, the tagging process must be updated on a yearly basis, adding new acquisitions and removing assets that have been retired or sold.

### • **Step 6: Standard mobilization procedures**

Standard Mobilization Procedures (SMPs) define the specific handling practices for various categories of equipment. Transportation personnel use these procedures to ensure that equipment is handled correctly throughout each move. SMPs may document how a piece of equipment is to be physically wheeled down a hallway, particular features of a piece of equipment, how equipment is to be packaged, and how equipment is to be secured inside a vehicle.

## Step 7: Specialized carriers – selection, training, and auditing

A critical element of the sharing process is the selection and training of transportation partners. Hospitals can either use their in-house transportation fleets or local carriers who specialize in moving sensitive, valuable, and cumbersome equipment. Ideally, carriers are familiar with the customer's facilities and regularly move medical equipment. After selection, carriers and drivers are trained on the equipment sharing processes, including: Standard Mobilization Procedures, communication practices, and the documentation for recording all elements of a move. Once a transportation partner has been trained and is active, moves are audited on a regular basis for quality control.

## Key performance indicators for measuring success

It is important that the equipment sharing program is structured to accomplish strategic and measurable goals. These are the six key performance indicators that can help health systems to measure success:

### Purchase avoidance

Sharing reduces the total inventory needed to fulfill the same case volume and number of requests each capital expense cycle.

### Rental avoidance

Sharing decreases the total number of rentals for each hospital because schedulers look for in-network, shareable equipment first.

### Incremental increases in case volume

Service line expansions, marketing of robotic surgical equipment, and improved patient throughput are all examples of how case volume can be amplified with a sharing program.

### Physician satisfaction

With a sharing program, more physician requests for equipment are being met because owned equipment is being used more strategically and collaborative purchases are addressing the needs of multiple providers.

### Cases covered by shared medical equipment

Each move should maximize the number of addressable cases to ensure that moves are being made strategically and to optimize logistics costs.

### Increased equipment utilization

Increasing the usage of owned equipment results in fewer redundant purchases, so you only buy equipment and backup units that are justified by case volume.



To learn more about starting an equipment sharing program contact Cohealo at [info@cohealo.com](mailto:info@cohealo.com) or call 855.692.6432