

## OR business management

# How surgery departments charge for OR time

**T**here is no standard method for charging for OR time. In this article, 5 OR business managers describe their OR charging structures, which primarily are based on the OR minute and assign a level of service based on resource utilization. The departments range from 11 to 21 ORs in nonprofit community hospitals with 240 to 500 beds.

In general, "I've seen everything from per-minute charges to facilities that don't have a base time charge," says Keith Siddel, MBA, of HRM Consulting, Creede, Colorado, who consults on hospital chargemasters.

"The key is to make sure that you cover your costs without making the charges overly burdensome to assess, manage, or audit."

It's common to charge by levels of service that are intended to reflect that surgical procedures vary in complexity and use of resources.

### OR time charges

For 4 of the 5 hospitals interviewed, the most common charging unit is the OR minute. One facility uses 15-minute increments. For 2 hospitals, an initial setup charge is applied to reflect the cost of opening an OR for a case. Four facilities also charge by level of service, or in one case, by specialty groupings (chart, p 20).

### Charging by levels

For the 3 hospitals that charge by levels (Hospitals A, C, and D), the levels are based on resource consumption, including staff, equipment, and instruments. They use from 6 to 12 charging levels.

Levels have certain pitfalls, Siddel notes (sidebar, p 22).

Hospital A, with 21 ORs, charges not only by level but also for certain supplies and for implants (chart, p 21). (Charts for Hospitals C and D are in the *OR Manager* Toolbox at [www.ormanager.com](http://www.ormanager.com))

### Deciding what is chargeable

In general, routine supplies are not separately billable, Siddel notes. Hospitals are no longer paid for about 80% of supplies (sidebar, p 23).

At Hospital A, the chargemaster team determines which items are chargeable. "That's the biggest challenge," says the OR business manager. "There are a lot of gray areas."

For instance, a monitor, as capital equipment, is not charged to individual patients, but can the disposable sensors be charged? "We err on the side of being conservative," she says, "but this may result in leaving things unbilled."

### Documenting supply use

Charging separately for supplies and implants requires nurses to document what is used when their priority is patient care. But separate charges are useful in determining exactly which supplies are needed for those cases, resulting in more accurate cost accounting, she notes.

Charge audits and education are keys to making this charge system work well.

## OR charging methods of 5 not-for-profit community hospitals

	<b>Hospital A Midwest 21 ORs, 500 beds</b>	<b>Hospital B West 19 ORs, 500 beds</b>	<b>Hospital C Midwest 14 ORs, 350 beds</b>	<b>Hospital D Midwest 13 ORs, 300+ beds</b>	<b>Hospital E West 11 ORs, 240 beds</b>
How does your surgical department charge for OR time?	Combination of time and level of service/acuity	By actual minutes patient is in room	Base rate (setup charge) + time	By actual minutes patient is in room	By actual minutes patient is in room
If you use time increments, what is the base time increment you use to charge for a surgical case?	15 minutes	Actual minutes	1 minute	Actual minutes	Actual minutes
Do you have a setup charge that always applies?	First 15 minutes is loaded to allow for setup costs	No	Yes	First minute is loaded to allow for setup costs	No
Do you have a minimum time charge you apply for an OR case?	Yes, 15 minutes	Yes, 1 minute	Yes, 1 minute	No	Yes, 1 minute
Does your surgical department use levels of service such as acuity in charging for OR time?	Yes	No, charge by specialty groupings	Yes, 12 levels	Acuity level is captured in minute charge	No
If you charge by levels of service (eg, acuity), what criteria do you use to determine the levels?	Number of staff in room Type of equipment Number of instrument trays	NA	Compilation of averages for staff, equipment, instrument trays	8 levels categorized by type of procedure, acuity, staffing, and equipment	NA
Do you use bundled charges (ie, flat amount for time, personnel, and supplies) for any of your procedures?	Yes. Lithotripsy cases and endovascular cases performed in hybrid suite	No	Yes. Cosmetic procedures. Also shockwave lithotripsy and prostate laser vaporization, which use an outside company	No	Not for the OR

“We have a wonderful staff and do lots of education,” says Hospital A’s OR business manager.

Every month she runs a report comparing the chargeable supplies issued with the supplies billed.

“We take the top 10 to 15 discrepant items and dive into the variances,” she says. For example, how many vials of Dermabond (a surgical adhesive) were issued and used, and how many were billed? The match is never 100% because some vials might have expired or been dropped.

Focused education keeps the staff up to date on charge capture. With casting material, for instance, the staff is reminded that the material is chargeable both when used for casting and when used under a tourniquet.

<b>Hospital A: Procedure billing levels</b>						
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
<b>Staff</b>	2	2	2-3	2-3	2-3	2-4
<b>Equipment</b>	None	Minimal	Moderate	Moderate	Moderate	High
<b>Instruments</b>	1-2 sets	1-2 sets	3-5 sets	3-5 sets	5+ sets	5+ sets
<b>Case Level</b>	Minor	Minor	Minor	Major	Major	Major
<b>Example</b>	D&C	Laparoscopy surgery	Lap Band	Roux-en-y gastric bypass	Total joints Spinal surgery	Craniotomies Heart surgery
<b>Equipment</b>						
<b>Minimal</b>	1-2 pieces: Electrocautery, insufflator, microscope, phacoemulsifier.					
<b>Moderate</b>	>2 pieces: Electrocautery, insufflator, microscope, phacoemulsifier, etc.					
<b>High</b>	DaVinci robot, surgical navigation system.					

### Pick your battles

Pick your battles to keep the system manageable, advises Hospital A's OR business manager. "Know where the money is, rather than getting sucked into too many details."

With implants in particular there is no tolerance for missed charges because implants drive a lot of costs and revenue.

"It takes constant reinforcement," she adds. "You have to find a carrot for the staff" to encourage compliance. She points out to them, "If you document accurately, we can get these items on the preference card. Then you will have more accurate supplies in the room."

### Base rate with 12 levels of service

Hospital C, with 14 ORs, uses a base rate, or a setup charge, and then a per-minute rate based on 14 levels of service.

The 14 levels reflect resource utilization, using a formula developed by the hospital's charging expert, that factors in the average number of pieces of equipment, instrument sets, and staff. The resources required were determined by reviewing preference cards.

When assigning levels to new procedures, the systems administrator runs a report that displays the equipment, instruments, and inventory items on the preference card. She then averages the number of pieces of equipment for the procedure and determines which 2 levels the procedure matches.

Next, she averages the number of instrument sets for the procedure and uses that number to select the primary level assignment. (Two peel packs count as one instrument set for the averages.)

Before making the final level assignment, she considers the quantity of inventory items and whether the staff requires special training. If either is elevated, the charge level is increased by 1.

The charging system, in use for about 10 years, was recently adopted for the entire health system of about a dozen hospitals.

"It works well because it is flexible and easy to maintain," explains the hospi-

tal's revenue cycle director, who was previously the surgical services business manager.

"When you do the year-end adjustments, you have just 14 categories to manage" rather than hundreds of procedures.

There are also some drawbacks.

It is not as easy to produce reports by procedure or to compare costs across facilities, she notes. For example, podiatry, eye surgery, and some general surgery procedures fall into the same category, making it hard to produce a report on procedure-specific charges and costs.

### Minutes and levels

Hospital D, with 300 beds, 12 major ORs, 1 cystoscopy room, and 6 outpatient ORs, charges by actual minutes the patient is in the OR and by 8 levels. The first minute is loaded to cover the setup costs for a room and overhead.

The 8 levels of service are based on the variable costs associated with procedures of differing complexity.

- out-of-OR procedures
- mini-diagnostic
- minor
- major
- major extensive
- open heart
- trauma
- multisystem trauma.

Major extensive cases, for example, are those that involve multiple organ systems or vessels and complex spine cases. Criteria for this level include:

- 3 to 4 FTEs
- setup and cleanup time
- use of complex equipment such as a cavitron ultrasonic surgical aspirator (CUSA) or navigation system.

The level is automatically assigned by the scheduling system when the case is scheduled. For new procedures, the clinical coordinator and OR business manager work with the informatics analyst to assign a level.

In this OR business manager's view, advantages of using the charging levels outweigh the disadvantages. "Charging by level allows us to have a streamlined, standardized approach."

Previously, the hospital used a procedure-based charging system, which was more subjective and did not consider revenue implications.

The level-based charges have been easier to maintain and have shortened the charging process.

"Charges are processed the same day or following day, which has positive revenue implications," she says.

Her caveat about setting up or converting a charging system: Understand your OR information system and its capabilities for capturing the necessary data. Assessment of the system was built to capture the data needed for supply/charge manage-

## Caveats on charging levels

There is no standard method for assigning levels for OR charging.

"The basic principle is that you need a way to make sure the patient is fairly assessed for an amount that reflects the actual cost of the case, including personnel and capital equipment," says Keith Siddel, MBA, of HRM Consulting.

"This is often driven by current Medicare reimbursement methods, which do not allow separate charges for capital equipment and routine supplies."

Level-based charging enables hospitals to build in costs of supplies and equipment that are not separately billable.

### Pitfalls of charging levels

A disadvantage of using charging levels based on average resource utilization is that it doesn't capture data on vari-

ances in utilization among surgeons performing the same procedure, Siddel cautions. Another drawback is that patients having the same procedure will be charged the same, even though their surgeons use differing resources.

For example, Surgeon A and Surgeon B both perform total hip replacements. Surgeon A routinely uses 2 staff members, a moderate amount of supplies, and moderately priced implants. Surgeon B uses 3 staff members, many more supplies, and high-priced implants.

If all total hip cases are assigned to the same level, one patient will be charged too much and another too little, he notes. Plus, the hospital isn't capturing data on individual surgeons' resource consumption through its charging system. That data could be used in working with surgeons to manage costs.

ment, such as lot and serial numbers, vendor-delivered nonstock item details, and product costs.

### Specialty-based charges

Hospital B, with 19 ORs, moved away from using acuity levels about 5 years ago and now charges by specialty groupings, using the actual minutes the patient is in the room.

The change was made because of concern the levels weren't being assigned uniformly, notes the OR's business director. There were also questions about how secondary procedures would be charged and reimbursed. In addition, some surgeons were concerned about how their self-pay patients would be charged.

Specialty-based charging made sense, he explains, because, "We staff by specialty, do our budget by specialty, and do our volume projections by specialty."

The specialty groupings include: orthopedics, gynecology, general surgery, ENT, maxillofacial surgery, plastic surgery, and neurosurgery.

### Advantages of specialty charges

Among the advantages he sees are:

- Supplies that are no longer charged for can be taken off the chargemaster, simplifying maintenance.
- Specialty-specific costs of equipment such as neuromonitoring devices, spinal components, and laser technicians can be included in the specialty charges.

A major advantage is the ability to justify the charges, increasingly important in an age of transparency.

"The business office loves it," he says, "because when anyone questions the charges, it's easy to show what the charges are based off of. Being able to justify your charges is what you want to do."

### Limitations of specialty-based charging

Setting up the charges was tedious, he acknowledges.

"We took a year's worth of data and attributed the costs per case. It was in depth," he says.

The process took place about 3 to 4 months before the ORs went live with a new information system, so the new charging structure could be built in.

How's the system working?

"Excellent," he says. "Some of the costs went down on smaller cases, which benefits the cash patients.

"On some, we found we were undercharging, which results in more revenue," though that was not the intent of the project.

## What is chargeable, billable?

The Centers for Medicare and Medicaid Services (CMS) has not provided a list of what is chargeable or billable.

"Unfortunately, there is no hard-and-fast list. Therefore, you need to go by broad categories," says Keith Siddel of HRM Consulting, Creede, Colorado.

These are general guidelines for what is *not* separately chargeable:

### Routine supplies used for the staff

Any supplies used by the staff in providing services may not be separately charged or billed. Examples: gowns, gloves, and hats.

### Routine supplies used by patients

In general, any item used 70% of the time for most patients is not separately chargeable or billable.

"A lot of commercial payers say that if you don't document

an item, you can't charge for it," Siddel says.

You also can't charge for personal items given to patients.

"This includes anything a hotel wouldn't charge you for, like shampoo or toothpaste," he says.

In the OR, this can get tricky. For example, you would not charge for a light handle cover because that is routine. But what about items used only when you perform a particular procedure? Most providers and CMS have never defined routine as an item "routinely" used only for a certain type of procedure. When considering whether something is routine, look at the general patient population in a particular care area.

### Capital equipment

Most capital equipment is not separately chargeable because these are items that are depreciated on the cost report.

### **Standard minute charges**

Hospital E, which has 11 ORs and 240 beds, uses a standard per-minute OR charge rate. The rate is based on the hospital's revenue and margin targets. The hospital benchmarks its charges with others in the region and tries to be at 10% less than its peers.

Insurance companies rarely challenge minute charges, the OR business associate finds, noting that "if you charge by item, that seems to be more of an issue."

Per-minute charges also are less burdensome for the nursing staff than recording supplies used, he says.

The minute charges are not differentiated by level. "A simple D&C [dilatation and curettage] here is very expensive," he notes.

Implants are charged separately. Hip and knee prostheses have a tiered charging schedule based on whether a low-, medium-, or high-demand construct is used. The surgeon determines the construct to be used. Total joint prostheses also are purchased using a capitated pricing structure based on the demand levels.

"It's nice because the vendors charge us a flat fee, and they are responsible for stocking themselves," he says. "We don't have to worry about the product number. On the patient's bill, it's one charge."

### **Bundled charges little used**

With a few exceptions, these 5 hospitals make little use of bundled charges; that is, flat-rate, per-procedure charges that cover OR time and related expenses.

Flat-rate charges apply primarily to specific procedures for which an outside contractor is used, such as shockwave lithotripsy and prostate laser vaporization.

Hospital E, which performs a high volume of bariatric surgery, charges a flat rate for those procedures performed by one group of physicians.

### **Bundled payment for spine**

Reflecting what is likely to be a trend, Hospital E has one insurance contract for lumbar spinal fusion that pays a bundled rate to the hospital and physicians.

"You have to watch [these contracts] as new implants and materials come along," the OR business associate observes, because the hospital's costs can consume more of the payment.

The surgeon's office likes the bundled arrangement, he notes, because it doesn't have to file a claim, but there is an administrative burden on the hospital.

Bundled payments could become more common. Medicare has a demo underway and is scheduled to begin a voluntary bundled payment pilot in 2013 under the health care reform law. ♦

—Pat Patterson

*Examples of the level matrices for Hospitals C and D are in the OR Manager Toolbox at [www.ormanager.com](http://www.ormanager.com)*

### **References**

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