# Charge Capture

Uncovering Hidden Revenue in the OR

A recent survey[1] shows that rising requirements in the face of static budgets is a top-of-mind concern for Directors of Pharmacy, and cost control is the number one priority for hospital CEOs. Hospital profitability dropped from 9.5% in 2016 to 8.5% in 2017.[2] Drug costs have gone up in recent years, as have labor costs. Stories about hospital bankruptcies, closings, and payroll shortages receive all-too-frequent mentions in the news.

Given all this, finding ways to control costs is of paramount importance to healthcare organizations. Fewer than one in five hospital leaders report cost reductions greater than five percent in the last year.[3] It is obvious that more work is needed to reduce financial pressures, but knowing where to start is less clear.

From a pharmacy standpoint, supply chain is an obvious culprit, as are medication shortages due to the cost (in both staff time and budget dollars) of sourcing alternatives. But there are small day-to-day steps hospitals can take to get a handle on costs and curb lost revenue. Inaccurate documentation of drug inventory use can be a significant cost factor and a viable target for cost saving efforts.

Lack of Visibility into Inventory Use

Pharmacy and operating rooms both have built-in controls to track use and waste. However, the frenetic and often unpredictable environment of the OR lends itself to more instances of missed documentation and waste. For example, anesthesia will often draw up succinylcholine at the beginning of a case. The skeletal muscle relaxant isn't always used during a procedure, but is critical in the cases where it is needed. As a result, the succinylcholine will be thrown away at the end of the case when it isn't needed, resulting in significant waste.
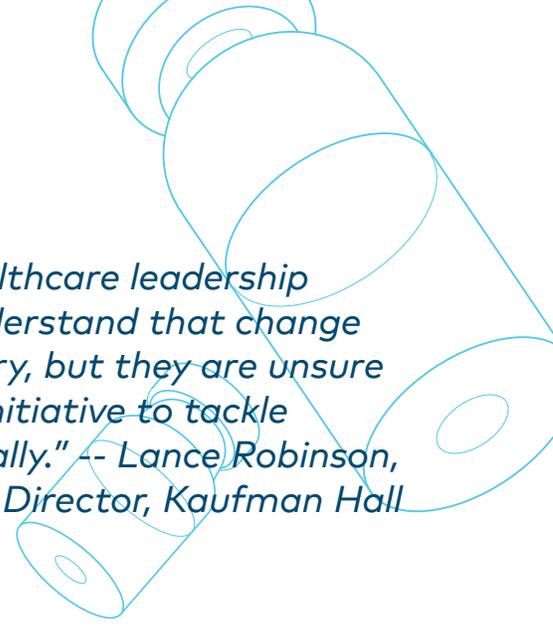
"Most healthcare leadership teams understand that change is necessary, but they are unsure of which initiative to tackle operationally." -- Lance Robinson, Managing Director, Kaufman Hall

Many (if not most) hospitals have purchased automated dispensing cabinets (ADCs) to help keep track of medication use and inventory in the OR. Anesthesia Information Management Systems (AIMS) have been implemented in many ORs as well. Both systems can effectively track dispense data, but if providers don't document usage properly, the expense for these technologies is difficult to justify.

In addition, while each system tracks data, there is no way of comparing the information from the two. Drug inventory is being used, but it is nearly impossible to get an accurate picture of where exactly these medications are going. As a result, many hospitals have shifted away from a "charge-on-dispense" model to a "charge-on-administration" one to try to bring more visibility to what medications have actually been used in cases.

In the fast-paced, high-stakes hospital environment, however, medication documentation often (appropriately) becomes a secondary priority to the needs of the patient. This is reflected in the fact that "charge on admin" models still sometimes result in documentation being incomplete or skipped altogether.

Undocumented Inventory = Lost Revenue

Whether it is administered or wasted, used inventory must be replaced. However, the costs

to replace these drugs differs depending on whether the use is documented or not. Documented waste is chargeable, whereas undocumented waste is not.

For individual departments, poor documentation can directly affect budgets through chargeback. The hospital must recoup that lost revenue somehow. Missing medications that can't be charged against cases may be charged to the OR, Anesthesia, or another department, where budgets are already tight. Charging back to a particular department is a way to recoup budget and can also indirectly encourage good behavior by enforcing correct documentation.

Replacement costs for undocumented medications mean extra expenditure, but also missed revenue opportunity.
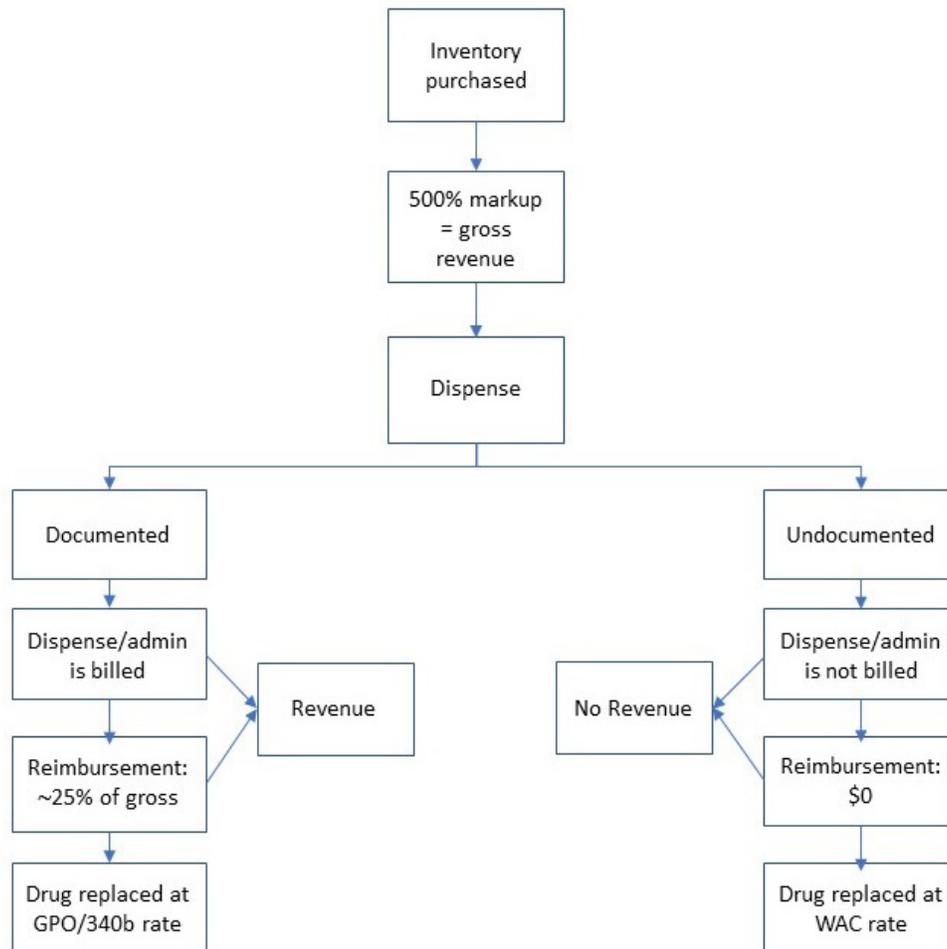
1. **The hospital buys inventory** from a supplier, either wholesaler or GPO. The hospital marks up the inventory by 5 to 7 times, according to recent analysis.[4] This is gross revenue.

2. **Inventory is dispensed.** Documented use can be billed, either on dispense or on administration. The hospital is reimbursed a certain percentage (usually 25%) of the gross. However, undocumented inventory cannot be billed. This is lost revenue.

3. **Inventory is replaced.** Drugs for which there is documented use can be replaced at lower rates for 340b hospitals or those on GPO contracts. But undocumented drugs must be replaced at wholesaler cost (WAC) or below (sub-WAC), which can be anywhere from 15-50% higher than 340b/GPO.

What this shows is that not only does lack of documentation lead to a loss in billing revenue; it also results in higher inventory acquisition costs. This is a lose-lose situation for hospitals that are already concerned about their bottom line.

If medication use is not properly documented, your inventory is, in effect, shrinking—i.e., stock that was purchased is not available for use. In addition to the financial consequences, there is no way of knowing if the undocumented medication was administered, dispensed, wasted, or diverted. Other consequences include effects on patient care and safety, productivity, and even staffing in cases where dose dispensing metrics are used to calculate staffing productivity and/or needs.

User Story: Charges Left on the Operating Room Table

A Midwestern 340B hospital changed from a charge-on-dispense billing option to charge-on-administration after a getting new EHR system and automated anesthesia carts. The goal was to assess the dollar figure of inventory shrinkage and compare what went missing and what was charged.

Historically, the pharmacy would hand out "narc packs" of controlled substances for the day's OR cases. With the introduction of ADCs and charge-on-admin, the process changed: anesthesiologists accessed the med drawer and pulled individual medications as needed. Ideally, they would then document the administration in the EHR, and the charge would be captured. However, if that documentation was not made (usually due to forgetfulness), the charge was not captured and could not be billed.

As a rule, anesthesiologists, CRNAs, and SRNAs were audited daily on controlled substance use, but non-controlled meds were unaudited. The hospital decided to perform a three-month audit to assess documentation and billing discrepancies for non-controlled meds in the OR.

The OR used an open-concept anesthesia tray in conjunction with RFID tracking technology. Each medication was tagged with an RFID sticker containing all of the drug information. All medications and par levels were verified by a pharmacist before the trays were sent to the OR.

At the end of each day, the trays were scanned using the RFID tracking system, and they could see what was missing (or expired), as well as what medication was being administered to which patient by which provider. The hospital could see what charges were uncaptured by comparing the report generated by the RFID system to what was reported in the EHR. For example, if the RFID tracking report showed that three vials of drug A were used, but the EHR showed only two, the hospitals could clearly see that discrepancy.

In comparing the RFID reports to the EHR over the course of three months, an assessment of 34 non-controlled medications in trays found that 18.75% represented uncaptured charges. This added up to $230,424 per month, which annualizes to $921,697 per year—almost $1M in lost revenue.

As a 340B facility, this hospital could not accrue budget when charges were uncaptured, as they must purchase replacements at wholesale prices. Thus, in addition to the lost revenue noted above, they were spending even more buying drugs at a higher price point than necessary. A further consequence: this hospital uses charge capture as a measure of productivity, so loss there meant a loss of FTE hours as well.

After the audit was completed and the results were reviewed, Pharmacy developed a plan to increase charge capture, including ceasing the practice of drawing up medications before cases and using RFID tracking software to monitor inventory use.

Knowing where medications are going and finding the right tools to track inventory use as closely as possible can uncover lost revenue.

Best Practices: Educate, Collaborate, Share Data, and More

Historically, hospitals have implemented either charge-on-dispense or charge-on-administration methods. Both billing methods can be effective, but only if providers accurately document their use. ADCs are useful for tracking dispense, while AIMS can be beneficial for tracking charge-on-administration.

Educate
It is important to educate and involve staff in the proper documentation of drug inventory and the

consequences of not adhering to protocol. It may help to engage the finance department to make pricing transparent so staff know the real cost of undocumented medication use to the hospital.

Collaborate
Along similar lines, Finance and Pharmacy can work together to create a better understanding of the billing and reimbursement process, and to present effective alternatives in meetings with leadership. Accurate charge capture can be a starting point to making a difference in the bottom line.

Share Data
Comparing data from ADCs and the electronic medical record (EMR) with AIMS can illustrate where the documentation issues are, and you can then simplify the documentation process to increase the likelihood that it is followed.

Other Options to Consider
Some facilities choose to perform **daily audits** of OR inventory. This can be done manually, which is time-consuming for an already busy staff, or via RFID tracking in conjunction with ADCs, the EMR, and AIMS. Audits can help identify what's missing, and can also pinpoint and suggest remedies for gaps in process or workflow. This can be as simple as changing the configurations of the AWS or AIMS to simplify the documentation process, like putting form factors in order of use or eliminating those no longer in use in the hospital.

Tighter controls on high-cost or high-margin drugs can be effective, but may frustrate staff who need access to those medications for cases. Chargeback to the Anesthesia department is an option, but puts extra burden on already tight budgets.

For 340b hospitals, another solution is to **identify medications** with no Apexus sub-WAC option and those with significant differences between WAC and 340b pricing. This will help inform inventory replacement purchasing and ensure the hospital gets the most for its money.

"Most healthcare leadership teams understand that change is necessary, but they are unsure of which initiative to tackle operationally."[5] While it may not be the biggest factor, ensuring accurate documentation of your medication inventory can add up to significant revenue and cost savings.

References

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