

Do You Know the KPIs of the Operating Room?

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Improving or maintaining operating room efficiency is a goal for every hospital. If you sell a product and/or service into the Operating Room (OR) and can help them improve their efficiency you will be regarded as a trusted advisor and not a supplier that can be commoditized. Impacting OR efficiency requires every sales professional to understand how the OR measures it. With that knowledge they can connect how their product or service can provide measurable value that impacts key performance indicators (KPIs) that are seen at the OR Department level and within

the C-Suite. One of the main reasons many hospitals are going rep-less in their ORs is because they have not been shown a measurable value that resonates with all the various stakeholders.

Operating Room KPIs

While KPIs may vary by hospital, consider the list below as a fair representation of how Perioperative leaders and hospital executives measure the contribution of their operating room personnel and surgeons. In general, the operating room measures volume, utilization, operational and financial statistics.

Let's look at each below.

1. **Volume indicators** measure the case-loads (number of surgeries) and times. There are three types of volume: case volume, case minutes and case minutes by time of day.
 - a. **Case volume** reflects the total number of surgical cases over a defined time period. It is typically measured for both in-patient and out-patient surgeries. While it is tracked monthly the best measure is the average number of cases per OR per year because this measurement takes into account surgeon vacations and attendance at medical conventions.
 - b. **Case minutes** reflects the total number of minutes of surgery each month. When this metric is compared to volume it helps to show growth patterns. For example: a small increase in case volumes with a large increase in minutes should mean that surgeons are performing longer more complex surgeries. If there is a small increase in case volume and a small increase in minutes then it probably means shorter surgical cases are being performed.
 - c. **Case minutes by hour of the day** measures the percentage of case minutes that are completed by shift. There are usually specific goals for the time period of 7AM-3PM and by 5 PM each day.
2. **Utilization indicators** measures the frequency of usage for the ORs. There are typically three OR measurements that are monitored in each hospital.

- a. **OR Utilization by day of week** measures total OR utilization for each day of the week. The goal is to have an even level of usage each day to prevent large open periods. In most hospitals the goal is to have each OR in use 75-80% of the time. This allows the OR scheduler to add emergency cases as required.
- b. **Block utilization** is measured by surgeon or service. Typically, a surgeon that has a busy practice and as an example does hip and knee replacements blocks an OR for “x” number of cases per day for “x” number of cases per week. Their block of time includes the turnaround time to get the OR ready for the next case. When this is taken into account the metric used is adjusted utilization = the total block minutes utilized + the turnaround time divided by the total block minutes available.
- c. **Off-hours surgery** measures the volume or percentage of surgery performed outside of scheduled OR time such as during evenings, nights, weekends and holidays. This may result from urgent/emergent cases or from normal over-run hours (i.e., surgery exceeding its scheduled time).

In addition to monitoring OR usage every hospital also monitors all of the anesthetizing locations within the facility (ORs, GI labs, EP labs, Cath labs, obstetrics and labor rooms) in order to maximize the efficiency of the anesthesia staff.

- 3. **Operational indicators** measure the efficiency of management of the OR. Here are six typical measurements: first case starts, turnover time, on-time starts, cancellations, add on’s and overtime minutes.
 - a. **First case start time accuracy** measures the percentage of first cases of the day that start on time. It is typically defined as the patient being in the OR at the scheduled start time. Most facilities allow for a 15-minute grace period. This is an important metric to keep the OR running smoothly all day.
 - b. **Turnover time** is calculated from the time the patient leaves the OR following surgery until the next patient is wheeled in. In medical parlance this is calculated as the length of time “from wheels out to wheels in for the next surgery”. Turnover times include cleanup times and setup times, but not delays between cases. For in-patients this is typically 25-35 minutes and it usually measured by following the same surgeon. This prevents variability amongst surgeons or services. Poor turn-over times can be caused when there is inefficient central processing of instruments or when nursing, environmental services (housekeeping) and anesthesia are not working in tandem.
 - c. **Same-Day OR Cancellation Rate** measures the percentage of surgical procedures cancelled (i.e., rescheduled to another day or cancelled altogether) on the day of surgery. There is often variability in how facilities define “same-day” cancellations. Depending on the facility they could define it as follows:
 - i. Only cancellations on the day of surgery.
 - ii. Any cancellations after 12:00 pm or 1:00 pm the day before the scheduled date of surgery.
 - iii. Only elective surgery cancellations.
 - iv. All OR cancellations.

Cancellations for same day surgeries are monitored carefully because they create open blocks. Some factors that can cause a cancellation are a full intensive care unit, surgeon unavailability, or bad weather

- d. **Add Ons** are for open time or urgent time. Open time is defined as time that is available to anyone and it can be booked in advance. This is usually for surgeons that don't have a block of time reserved each week. Urgent time is the time that is available 24 hours before. This allows cases to be scheduled that need to be performed urgently but are not emergencies. Many general surgeries are examples of urgent times.
 - e. **Overtime minutes** is the amount of overtime pay paid to OR staff. Overtime can occur due to any of the following: lack of on-time starts, increased turn-around times, incorrect staffing levels, gaps in the schedule, over booking or patient complications.
 - f. **Complications** can come in many forms from never events to issues such as nausea and vomiting post-operatively.
4. **Financial indicators** measure revenues and expenses. Typical examples are Contribution Margin (Mean) per OR Hour, medical supply costs per case, clinical hours per case and excess staffing costs.
- a. **Contribution margin (mean) per OR hour** is the hospital revenue generated by a surgical case, less all the hospitalization variable labor and supply costs. If it is low it is generally because the surgeon is too slow, uses too many instruments or uses expensive implants.
 - b. **Medical supply costs per case** are the average costs per case. It includes the cost of all disposable supplies and implants. Tracking this metric allows hospitals to monitor medical costs per specialty and by surgeon.
 - c. **Clinical hours per case** measures how much time the clinical staff (nurses, per-op and post-op staff and clinical support staff is spending with each patient.
 - d. **Excess staffing costs** measures the staffing costs associated with underused and overused OR time.

Parting Thoughts:

Sales professionals should understand how accountability and performance issues drive procedures and activities for the Director of Surgical Services and hospital strategic procurement. KPIs (business results) can provide the sales representative a lens for understanding both departments underlying motivations. The aforementioned KPIs reflect several of the important metrics measured in the OR.

These terms and others are included in our New Book Entitled "Selling to Hospitals & Healthcare Organizations: A Glossary of Business Acumen & Personnel Available on Amazon and Kindle.

<http://amzn.to/28K8049>

As always we welcome your thoughts and input. Let's start a discussion and elevate the sales profession with a thoughtful, civil and informative discourse.

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