Can OR efficiency methods be applied to a surgical facility with few data, or should data on cases and processes be collected first?

With respect to OR allocations and staffing on workdays, the most important data are the time of the end of the last case of the day in each OR. This can be inferred with negligible error from anesthesia billing data; click here for paper. The incremental value of each additional datum is sometimes small. Consider two scenarios. In scenario A, there are data for two months on the times of the last case ending in each OR. In scenario B, there are data for two weeks on all of the cases. Scenario A would be much more beneficial. In some situations, the incremental value of collecting more data, as opposed to simply using expert opinion, will be negligible. For example, suppose that the workday begins at 7:00 AM. The managers are polled to estimate when the salaried orthopedic surgeons finish their cases in an OR. The managers guess that the surgeons finish their elective cases between 2:45 PM and 4:15 PM each workday. In that circumstance, there would be little incremental value in collecting more time data. Click here to download the full article. Adjusting staffing would have negligible impact on OR efficiency, as would reducing turnover times. Click here for the abstract or click here to download the full article.

With respect to improving decision-making processes, creating scenarios manually can be a quicker way to evaluate processes than via observation. For a description of scenarios, download this PDF or read this paper. In one full day with one or two experienced on-site day-to-day manager(s), the scenarios will have been created manually. By the end of the day, (a) you will have a good assessment for how all of the managerial decisions are being made and (b) how far those decision processes are from that which is the optimum based on the ordered priorities. Using detailed data on all cases to create the scenarios automatically is preferred, because such data are unbiased and do not take the managers time. However, use of the scenarios as pre-designed role-playing and mockup of decisions is a far faster process than observation. The scenarios may also train the manager(s) in the process of their assistance. Completing the scenarios for longer-term educational value would take another day of work.

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