

# Incentivizing Surgeons and Teams to Improve First Case On-Time Start Metrics: Using The Carrot Versus The Stick

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## Background/Introduction

Delaying the first cases of the day can have a ripple effect on the efficiency of the surgical schedule and cause a decrease in patient, physician and staff satisfaction as well as an increase in the cost of staff overtime.

The high frequency of delayed first-cases appeared to contribute to cancellations of cases scheduled later in the day, long surgical queues, consistently high hospital censuses, and low morale amongst residents, fellows, attending physicians, nurses, and other OR staff members. Patient satisfaction was negatively impacted due to long wait times and last-minute cancellations. (Coffey, C., et al, 2018)

Many projects have been produced focusing on the multiple factors impacting on time first case starts.

Operating room (OR) efficiency continues to be a high priority for hospitals. In this context the concept of benchmarking has gained increasing importance as a means to improve OR performance. Participation in a benchmarking and reporting program and thus the availability of reliable, timely and detailed analysis tools to support the OR management seemed to be correlated especially with an increase in the timeliness of staff members regarding first-case starts. (Pedron, S.,et al, 2017)

There has been a shift to focus on incentivizing teams to have an investment in producing positive results. “Beginning the first case on-time in the OR is a complex process. It requires the patient, surgeon, anesthesiologist, and OR nurses to be physically present and prepared before the start time.” (Pashankar DS, et al, 2020)

## Purpose/Objectives/Hypothesis

The purpose of the project was to capture data that describes the delay types for first cases and identify the leading cause of delays. By identifying the leading cause of delays a more profound focus can be placed on addressing the specific cause and make the biggest impact. Will using positive reinforcement and incentives improve surgeon arrival time and increase the number of first case on time starts to enhance operating room (OR) efficiency, decrease staff overtime, and increase patient satisfaction?

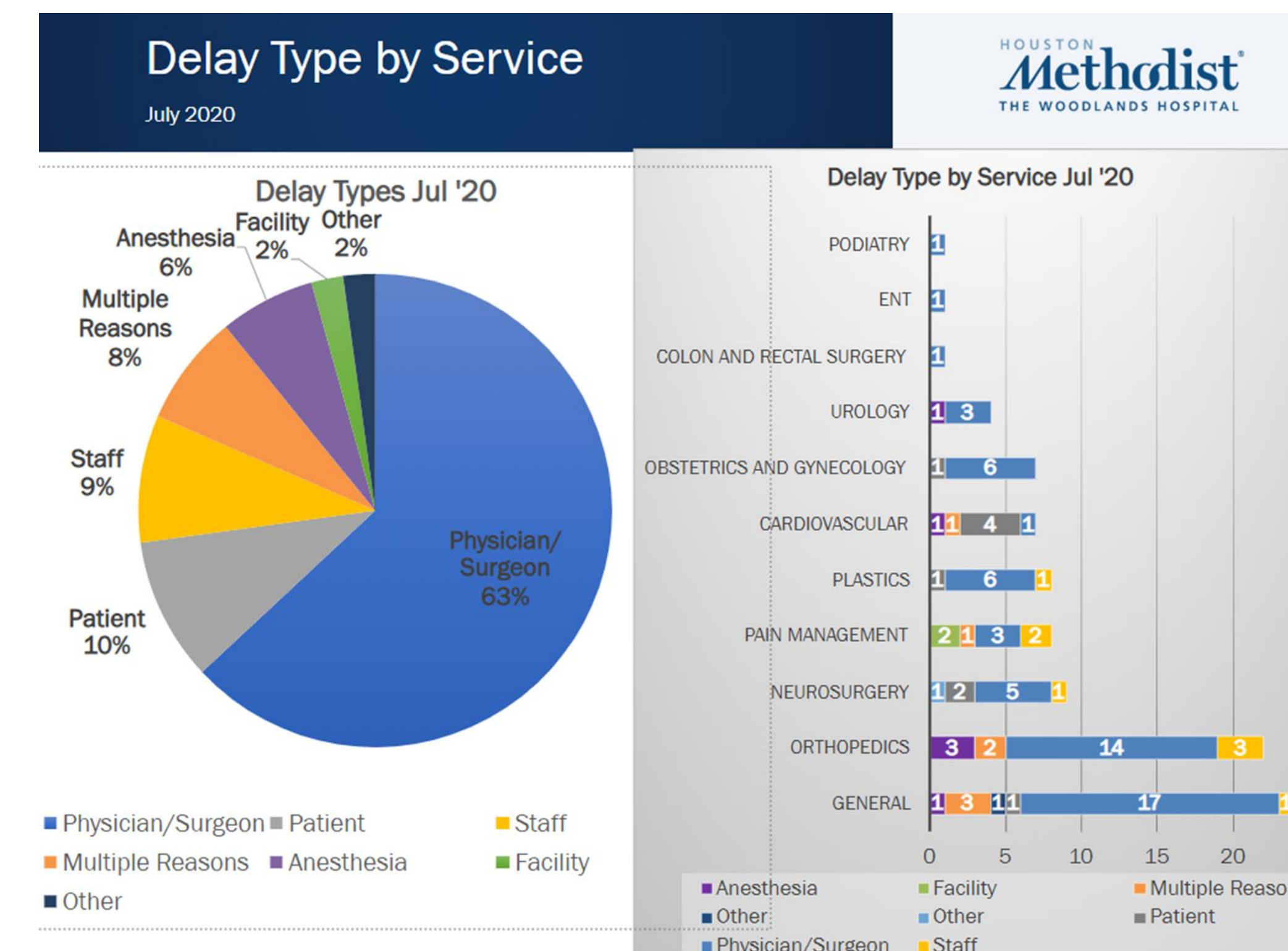
## Method

The perioperative unit consisted of both inpatient and outpatient surgical population in a community hospital with 25 operating rooms (ORs) and volumes of >900 surgical procedures per month. On time first case starts included all service lines, patient ages, and procedures scheduled to roll into the OR weekdays between 0630am-0830am, excluding emergency add-ons, weekends, and holidays. There was already a process by which the OR nurse would indicate the delay type or category and any commentary necessary to describe the cause. When analyzing the delay reasons, the factor with the greatest frequency and impact was consistently the surgeon arrival and identification of the patient on time. Therefore, the focus was placed on categorizing physician results month to month and incentivizing the physician to find value in arriving and helping to roll to the OR on time. A committee was formed including leadership, nurse staff, surgical technologists, and perioperative resource nurses. Considering the hospital system benchmark for on time first case starts, the committee set a monthly goal of 80% average compliance. Recognizing the competitiveness of our surgeons and the desire to have public acknowledgment of their accomplishments, incentives included balloons, published photos, socks, cupcake, small trophy with goat figurine, unit large trophy with a name placard displayed at the OR front desk and a quarterly incentive including a special parking spot. Progress was reviewed weekly during a perioperative efficiency meeting and delay opportunities and adjustments were discussed. Winners of the GOAT trophy were announced during monthly staff meetings, a photo was posted on the unit communication board, quarterly surgical staff meeting, and a special hospital-wide photo announcement was placed on the desktop screensavers.

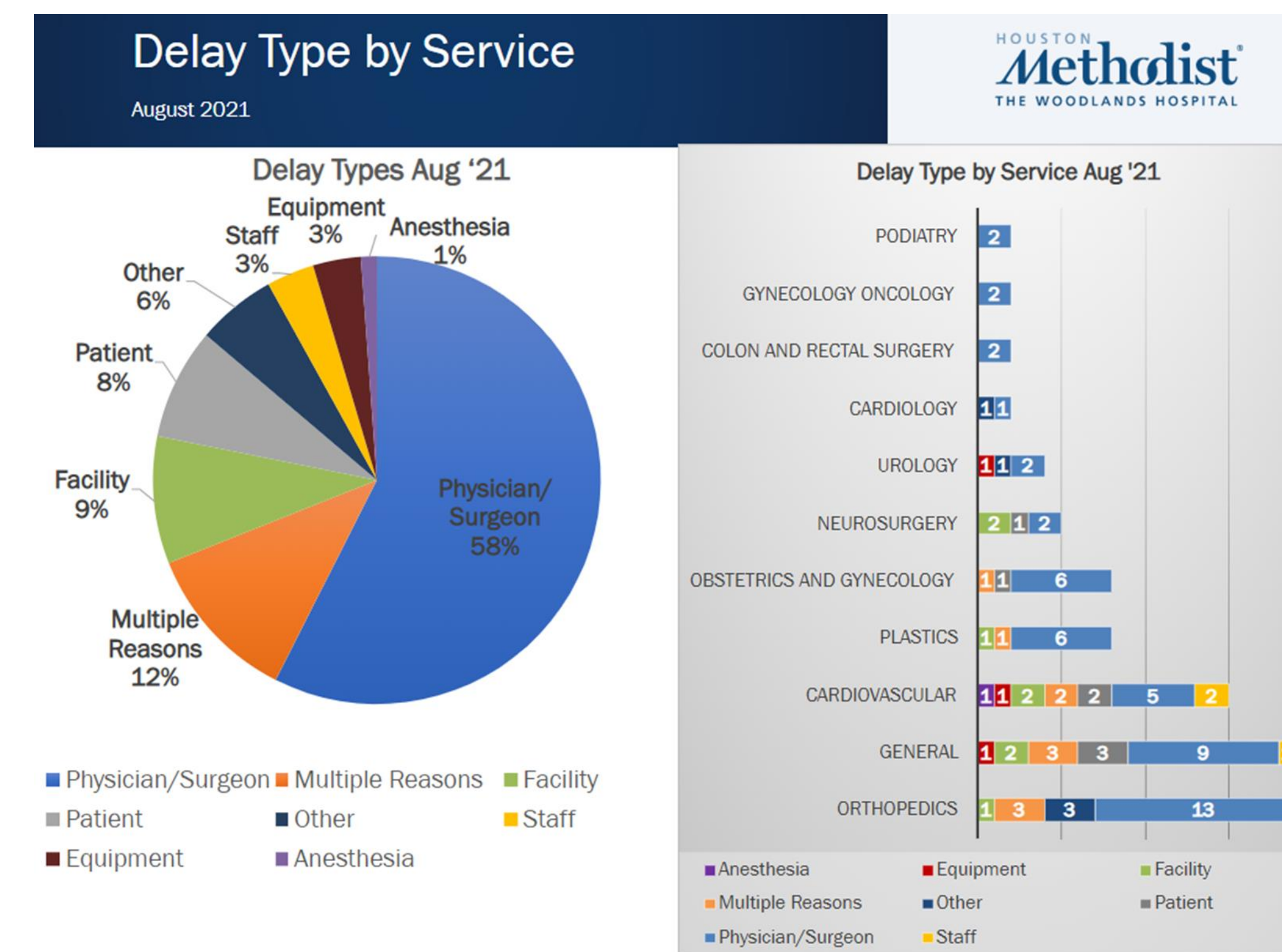


## Results

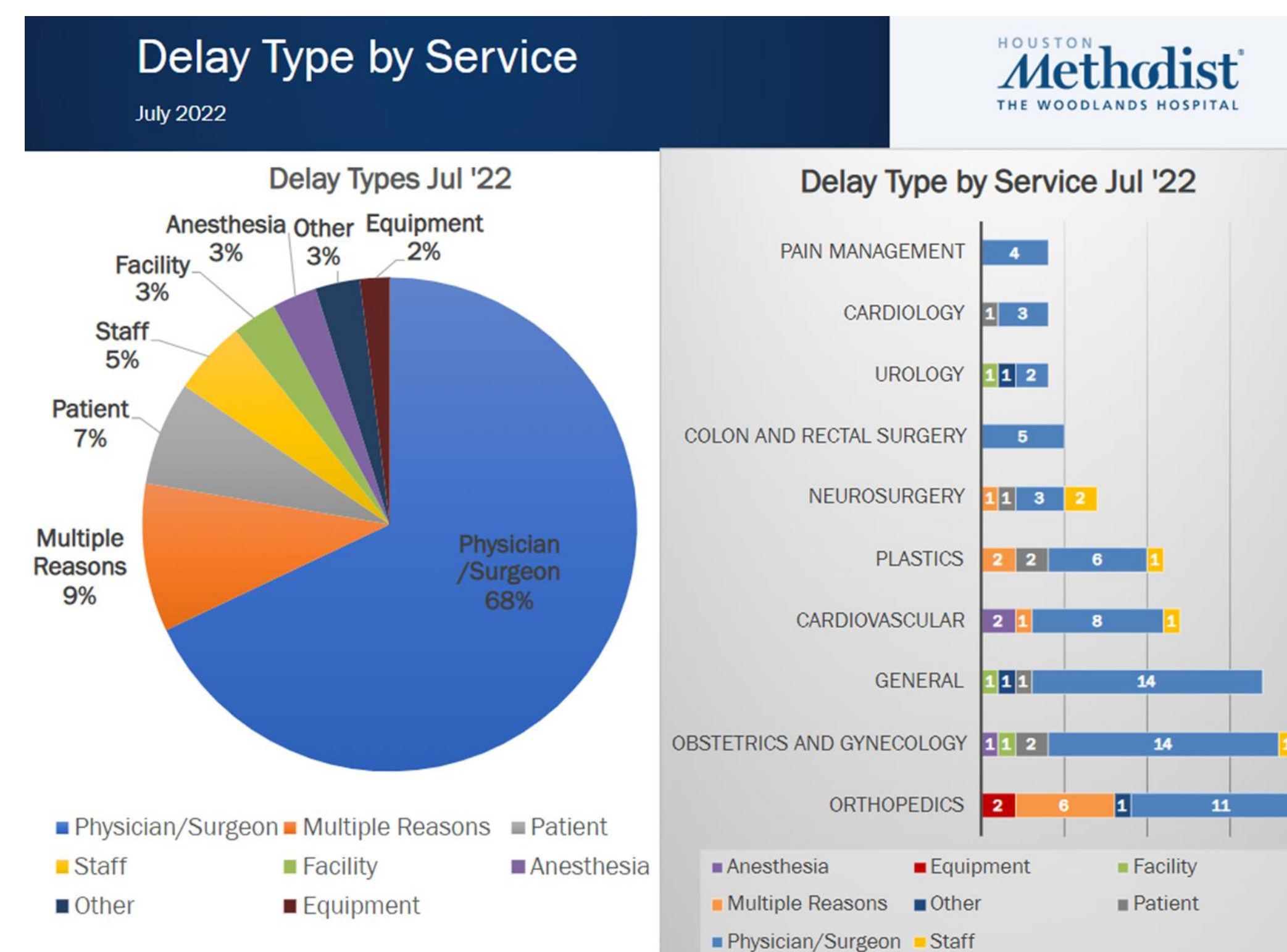
Beginning:



Middle:



End:



## Results/Implications

After one year, the incentive program did not have the desired affect on the data points that were evaluated. Actualized results during July 2020-21 and July 2021-22 for on time first case start compliance decreased from 60% to 58% and unit staff overtime increased from 2.32% to 2.44% but remained below the hospital threshold of 3%. However, patient satisfaction increased from 88.7% to 91.9%. There are many special factors that impacted the results during the timeframe the project was implemented such as OR expansion, 44% of OR staff are new hires and OR volumes during the time of COVID.

## Future Actions

Future modifications of the incentive program could look at physician satisfaction survey data points, adding special incentives for the OR staff, better communicate the correlation of the physician incentives to the desired outcome of physician on-time arrival at the quarterly surgery meetings and addressing barriers to the physician delay component of the on-time start potentially including modification of their scheduled start times. With these modifications and leadership support, the project continues to evolve.

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## References

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