## Expediting Obstetrical Patient Throughput: Decreasing Lengths of Stay and Optimizing Hidden Bed Capacity

**NDNQI** Learner Objective

Congratulations again and enjoy your stay at Woman's Hospital.

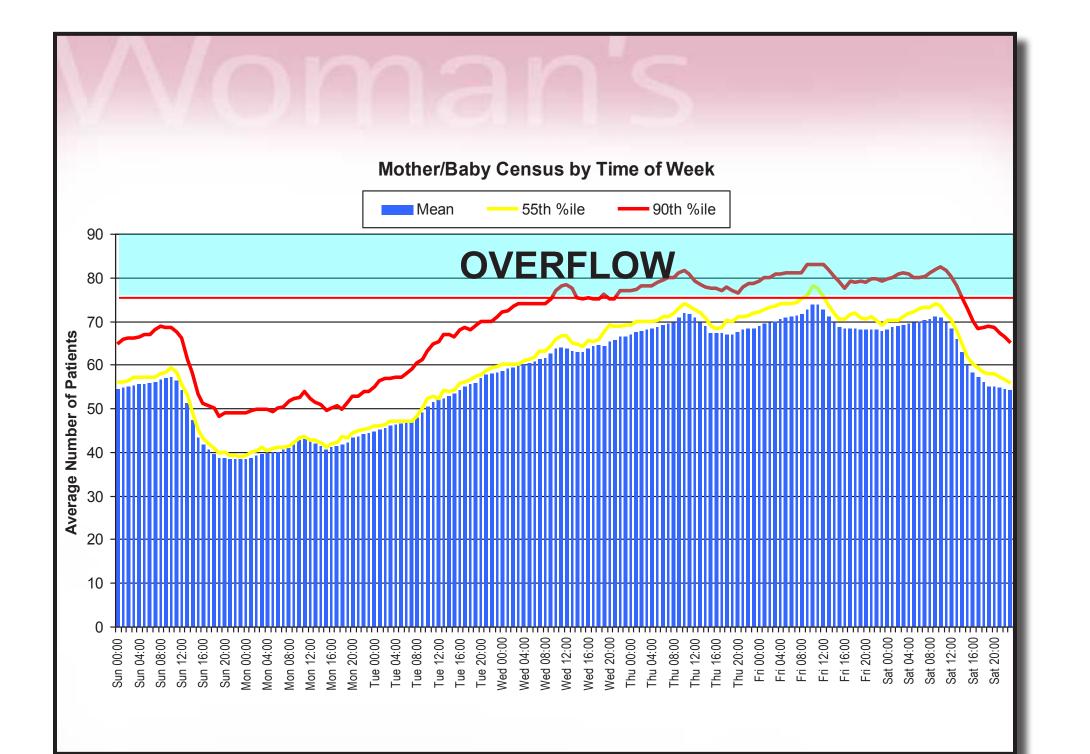
Identify and evaluate the impact of the nursing workforce's proactive discharge management and improved communication efforts on obstetrical throughput, length of stay, and hidden bed capacity.

### Leah Aswell Terrell, MSN, RNC-MNN Dana Vidrine, BSN, RNC-MNN Woman's **Mother/Baby Department** Woman's Hospital exceptional care, centered on you Baton Rouge, LA

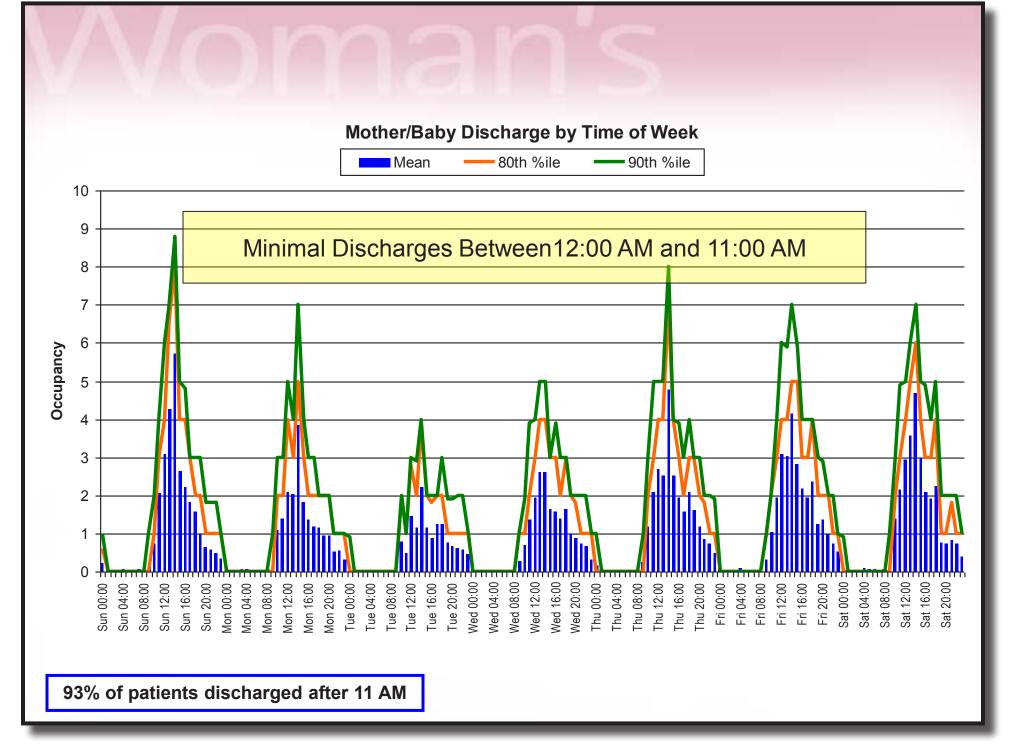
## Background

### **Background Gap Analysis**

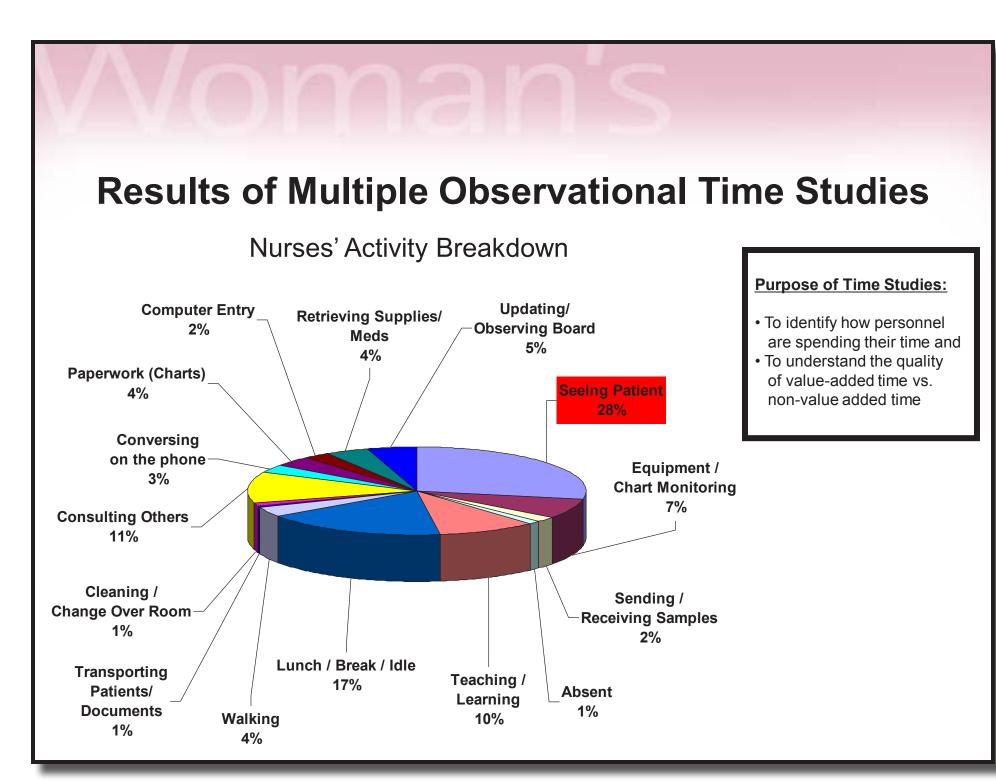
- Existing Capacity Constraints
- Prevalent Inconsistencies in Practice Patterns
- Need to Expedite Patient Throughput

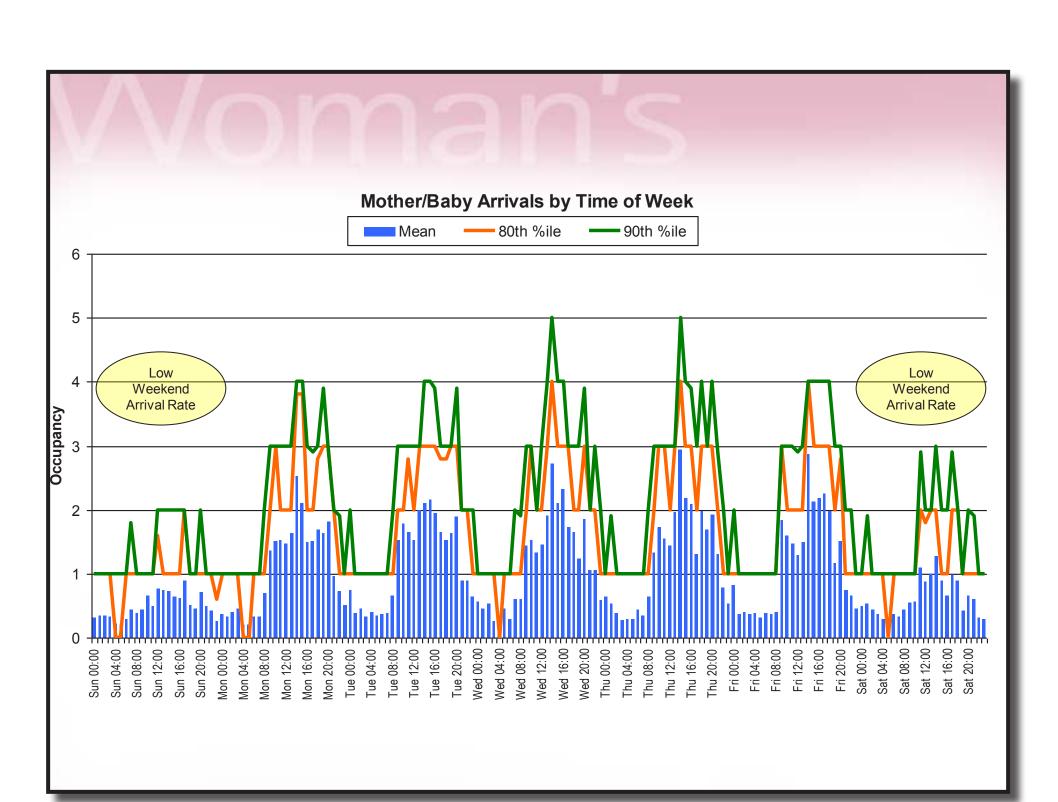


- Mother/Baby overflows (occupancy exceeding 77 beds): 45% of all Fridays
- Mother/Baby overflows from noon Wednesday until noon Saturday: 10% of the time Patient days on overflow area: 2,000+ annually

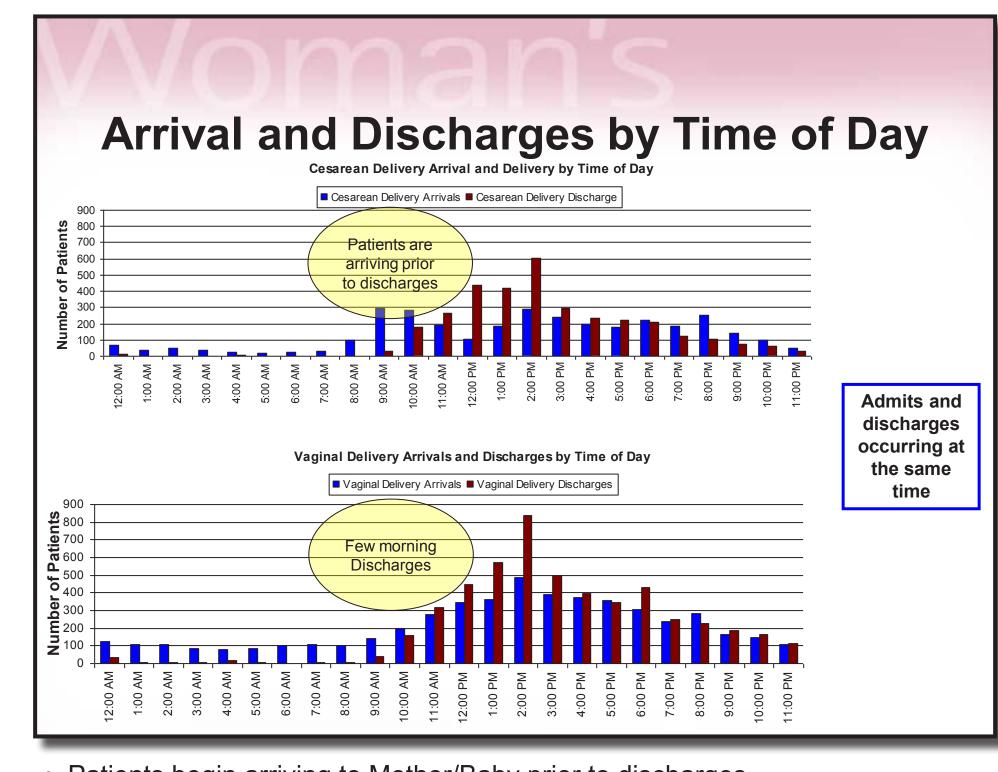


- Minimal discharges occur between Midnight and 11:00 AM

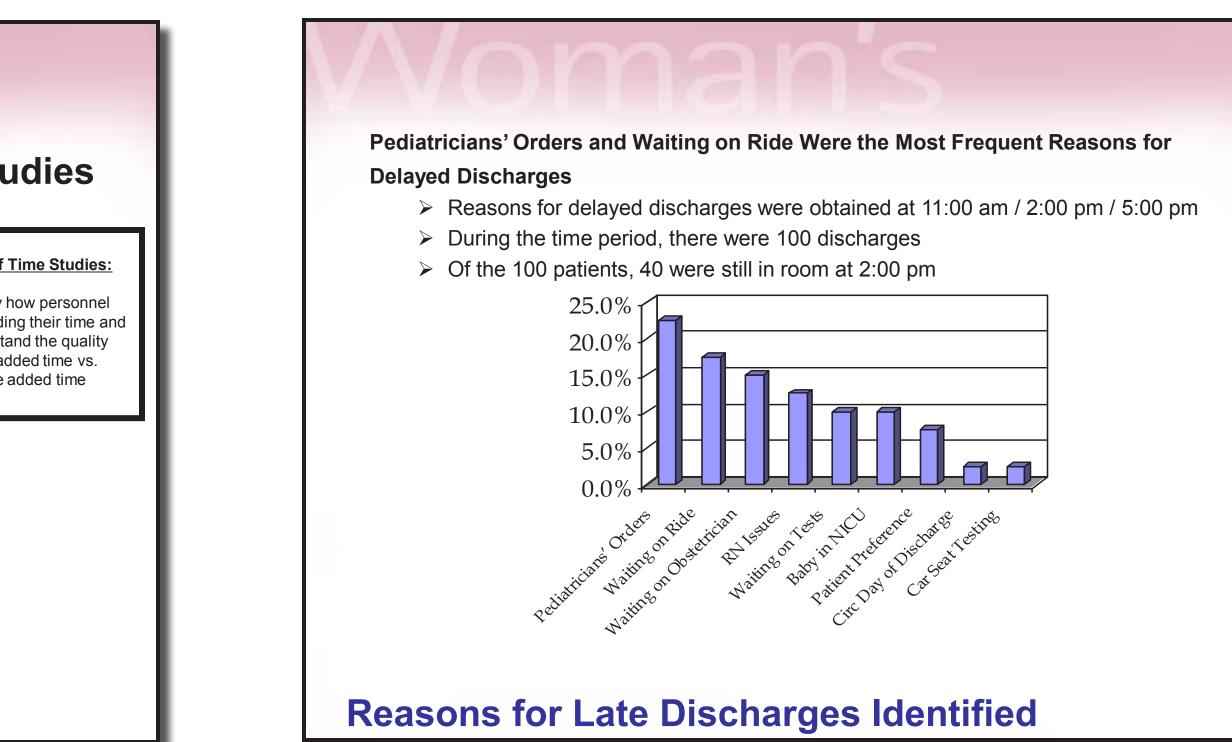




- Low weekend arrival rate
- High arrival rate occurring Monday through Friday
- Peak arrival rate occurring Wednesdays and Thursdays

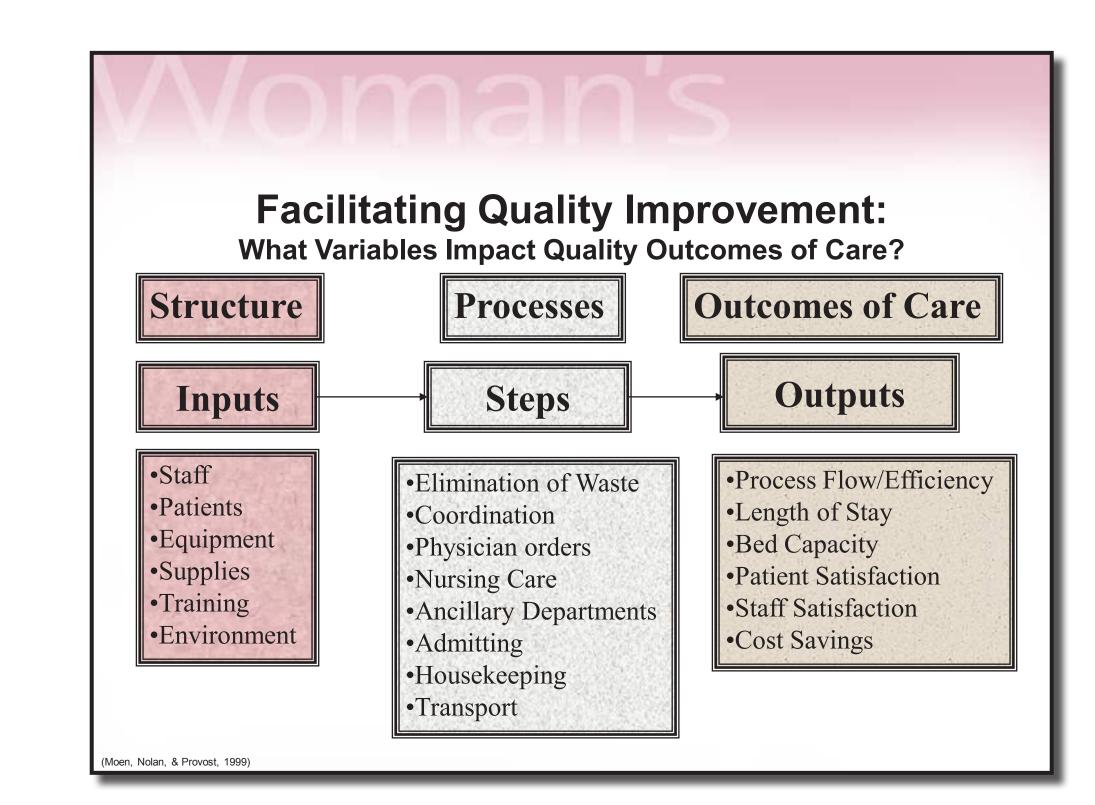


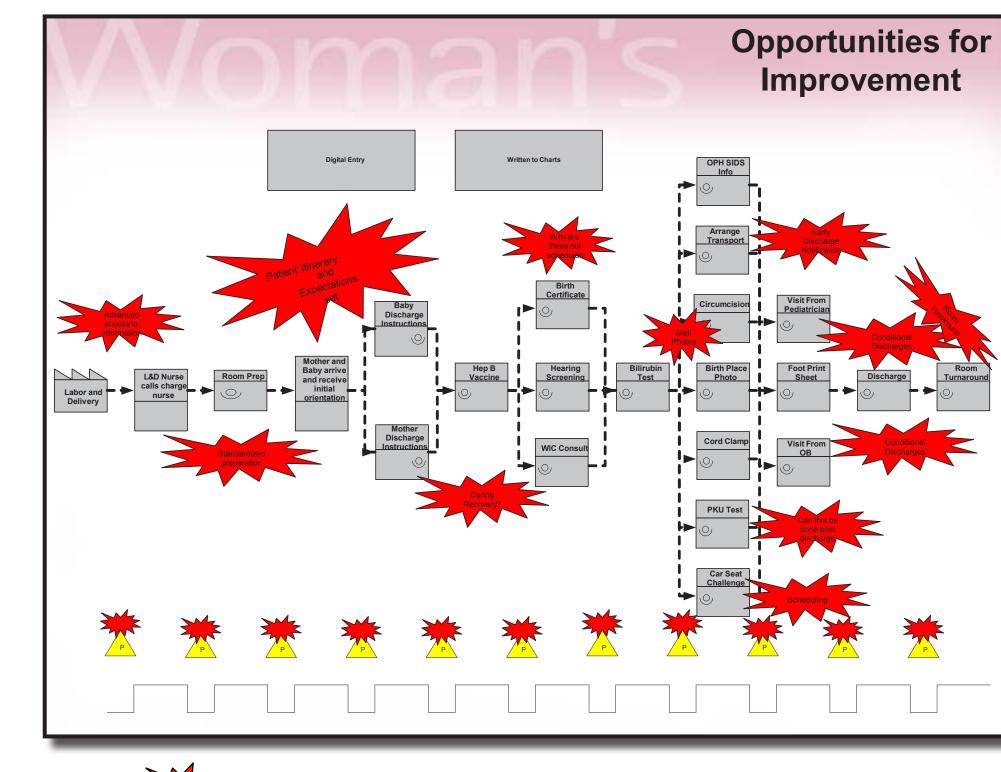
- Patients begin arriving to Mother/Baby prior to discharges Admits and discharges occurring simultaneously
- 93% of patients are discharged after 11:00 AM
  Peak discharges occur on Sundays



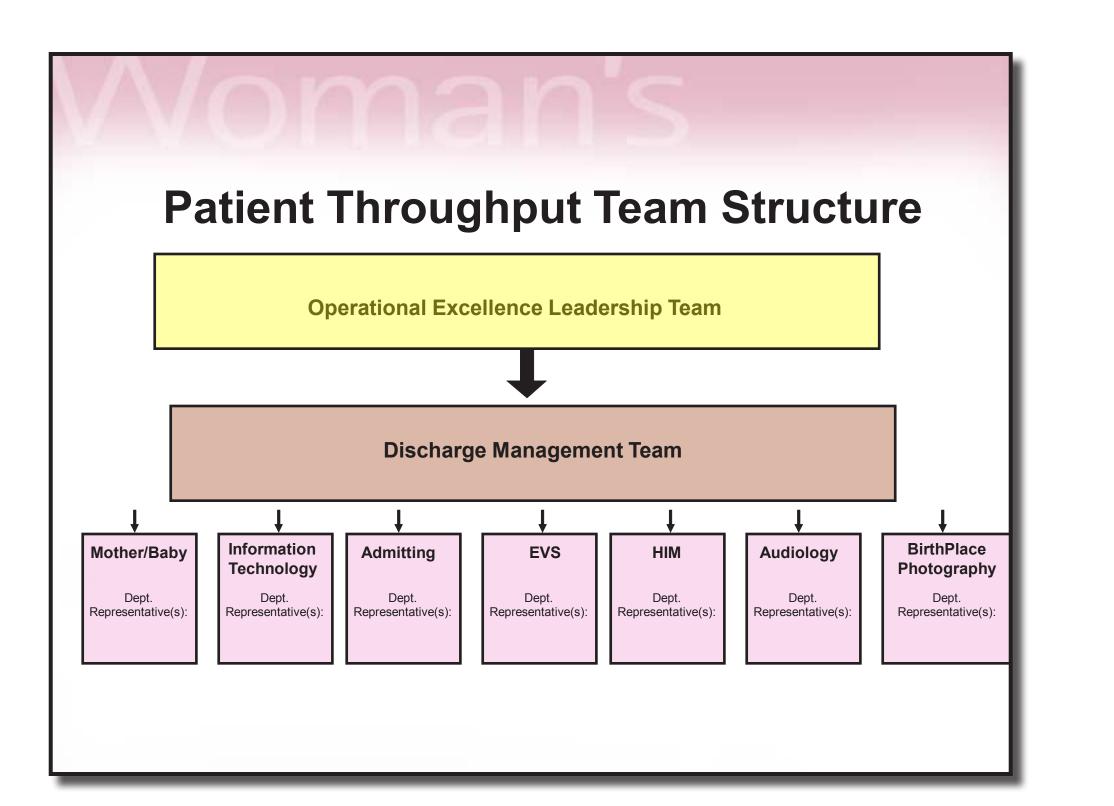
### Methodology

- Process Mapping Utilizing Value Stream Maps
- Review of the Literature
- Time Studies
- Data Analyses





• Each represents an identified opportunity for process improvement



## Results/Outcomes/Findings

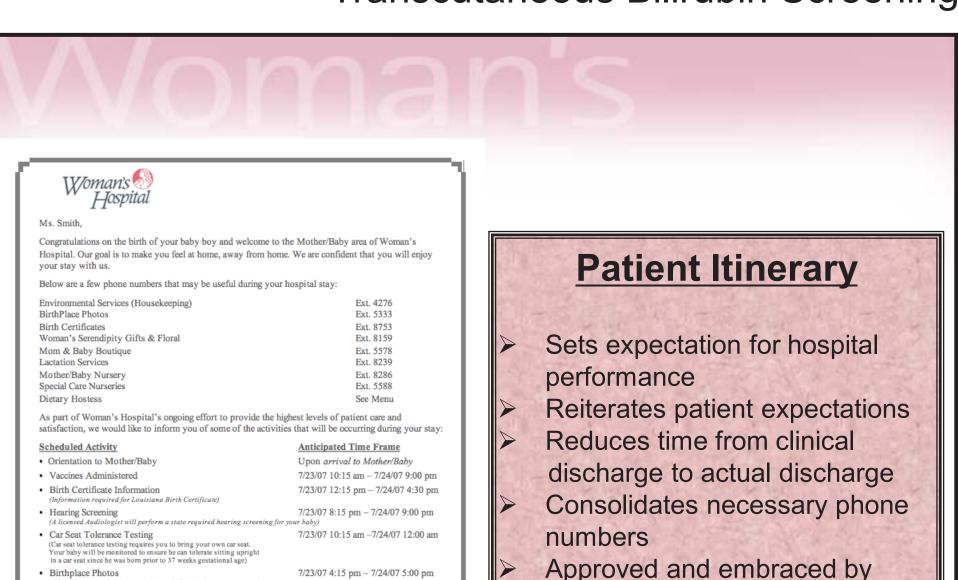
- Key Performance Indicators (KPI) Identified Average Length of Stay (ALOS) Car Seat Tolerance Testing
- Cesarean Section Delivery ALOS PKU/Newborn Metabolic Screening
- Vaginal Delivery ALOS BirthPlace Photography Appointment

New and Improved

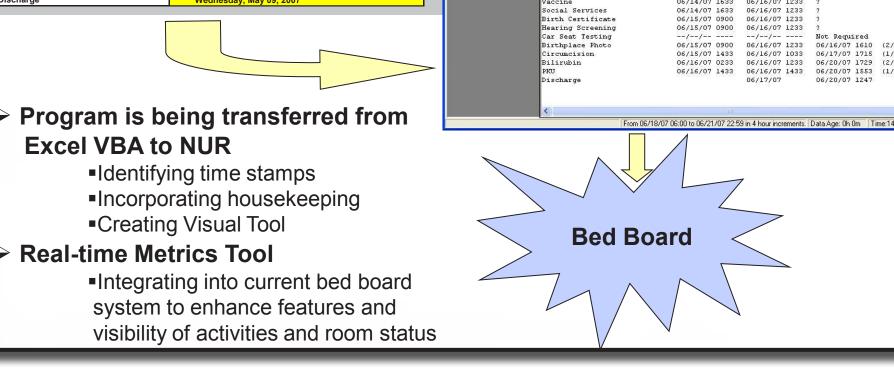
Bed Board

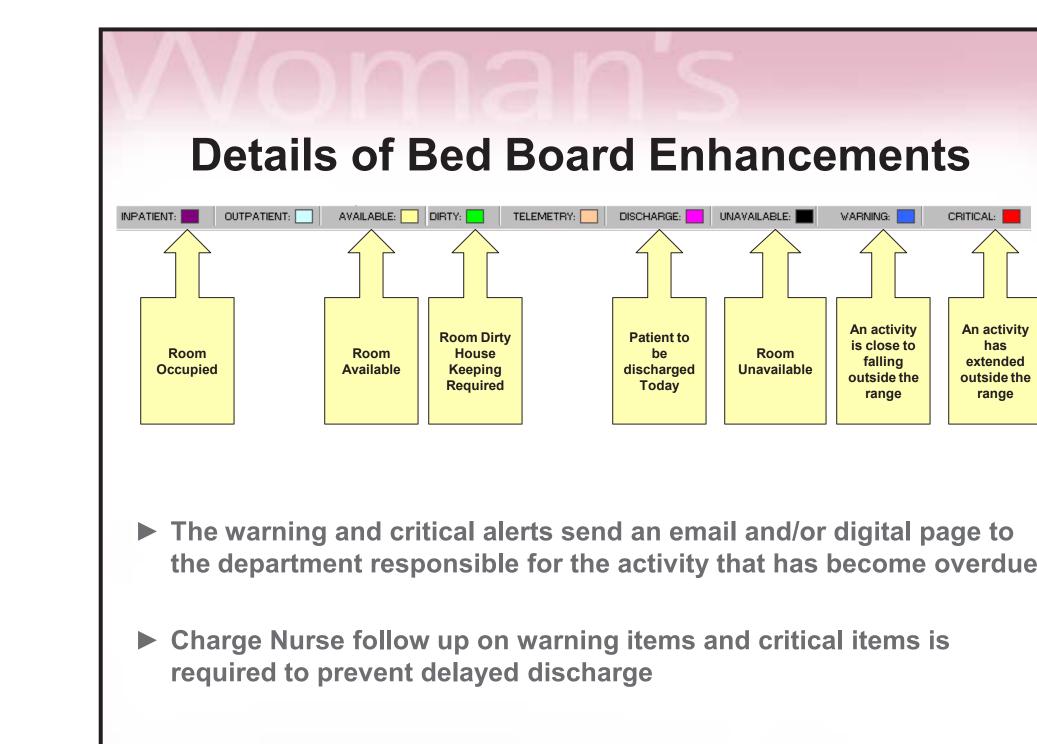
Full Avail Total

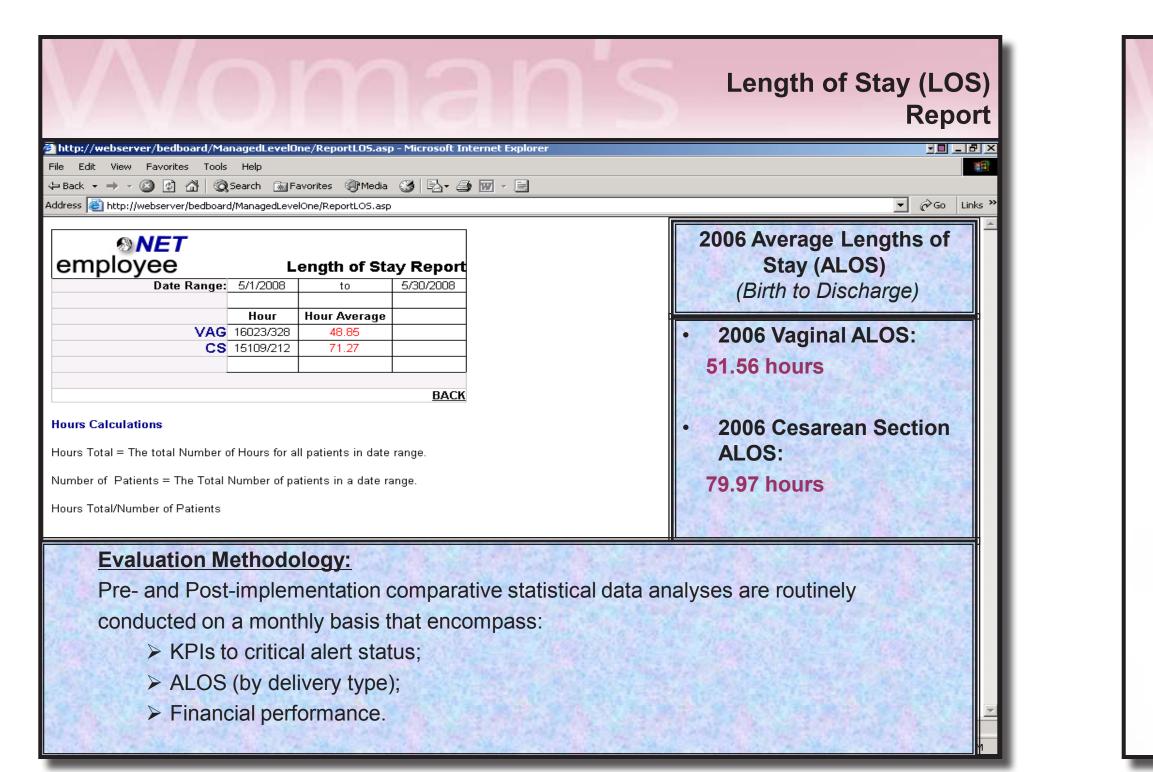
- Hepatitis B Vaccine Administration
- Transcutaneous Bilirubin Screening



# Birth Certificate Appointment Audiology Screening Appointment Developing Patient Itinerar Meditech Elowsheet View Tabs Help NOTE POC ADMIN DATA PCI PRNT PROFIL MAR LABS Phy Rpt Kardex





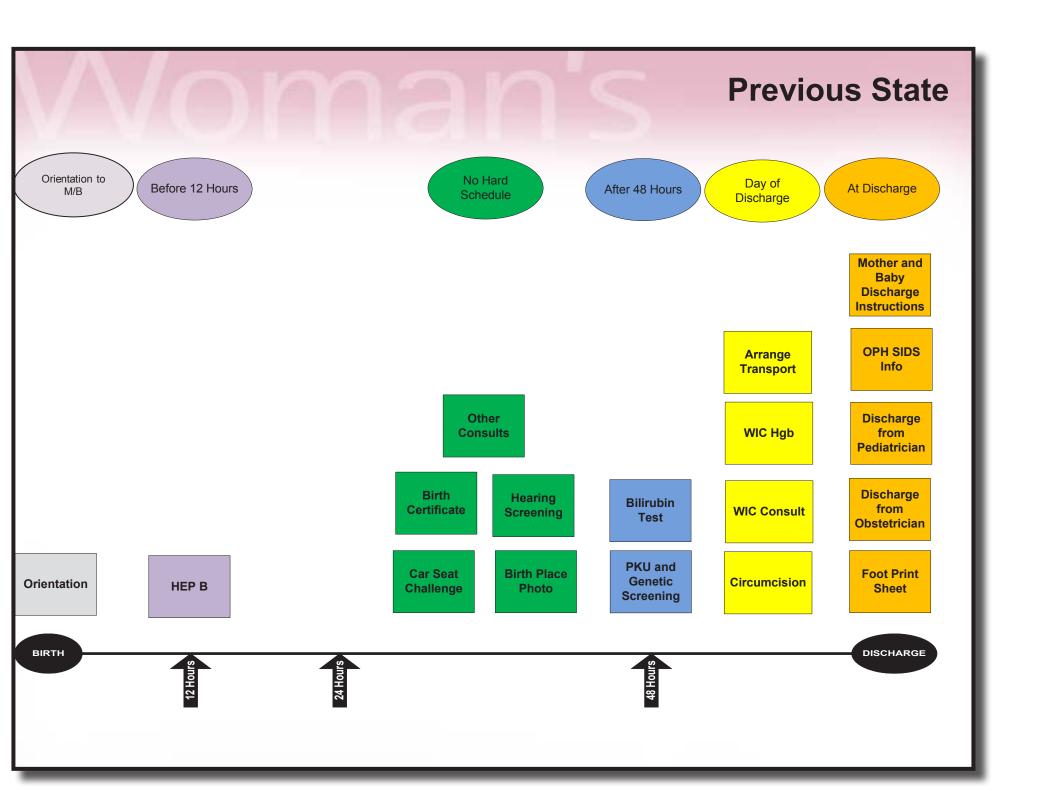


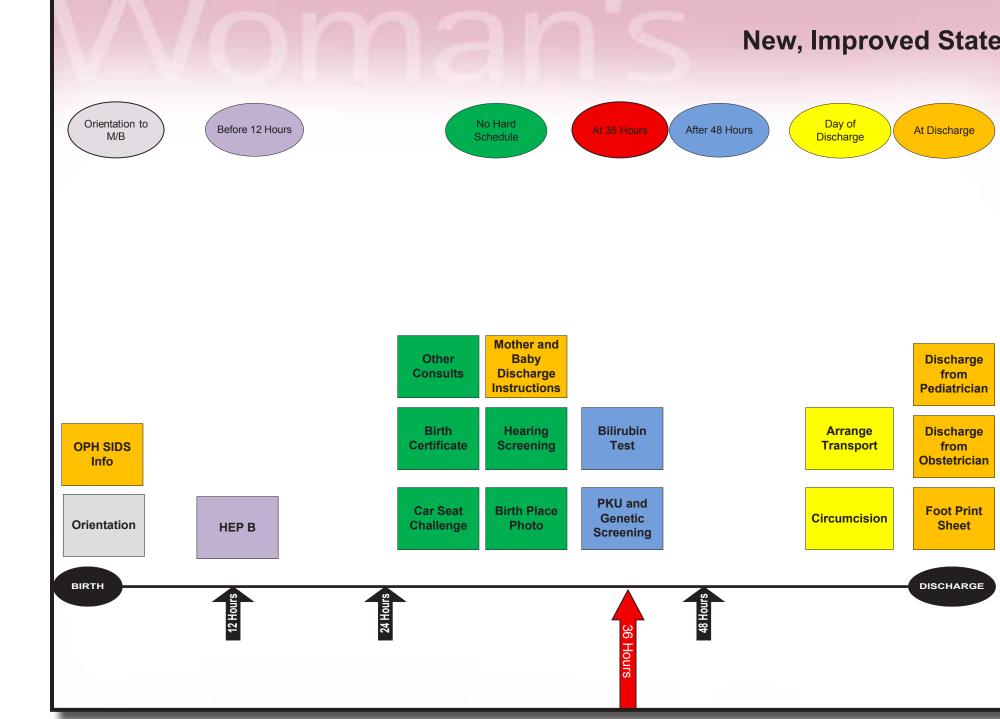
INPATIENT: OUTPATIENT: AVAILABLE: DIRTY: TELEMETRY: DISCHARGE: UNAVAILABLE: WARNING: CRITICAL:

 The C/S delivery ALOS has decreased by an average of 2.2 hours The vaginal delivery ALOS has decreased by an average of 7.5 hours

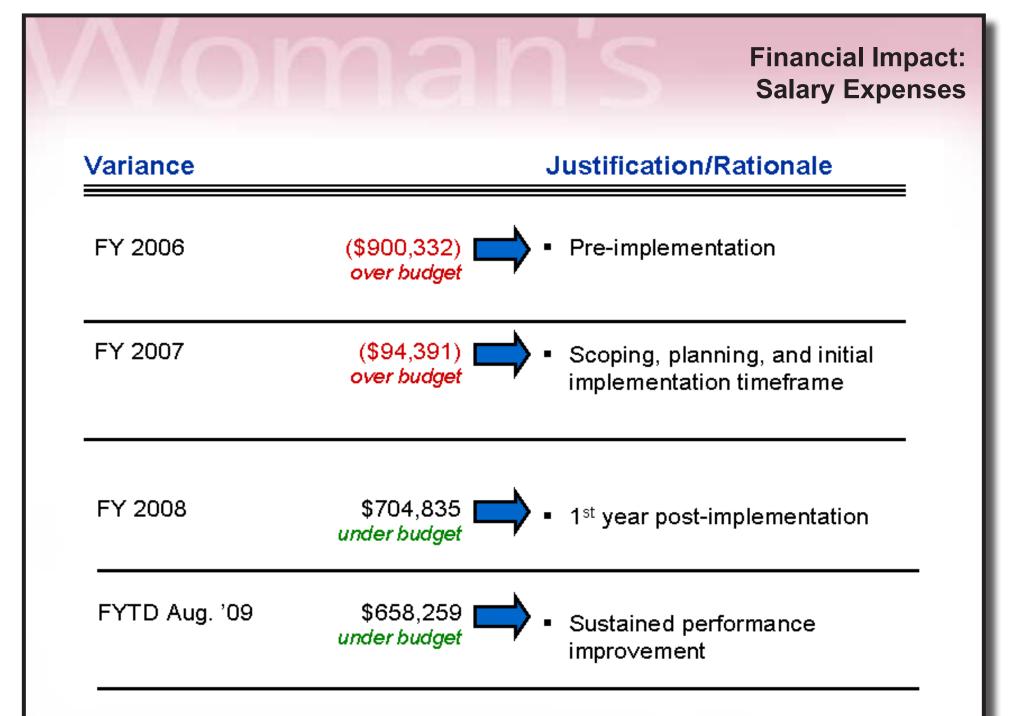
### Conclusion/Summary

- Decrease Average Lengths of Stay
- Increase in Hidden Bed Capacity
- Decrease in Salary Expenses/Staff Overtime
- Proactive Completion of Clinical and Non-Clinical Activities













► "Big Picture" Visibility at all levels

**How Does the** 

**Enhanced Bed Board System Help?** 

- ► Environmental Services can see workload
- ► Charge nurse can see open rooms and call to check status on patients ready to leave
- ▶ Can predict overflows
- ► Enhances interdepartmental communication

#### Results/Outcomes Decreased Average Lengths of Stay (ALOS) and interdisciplinary communication and Increase in "hidden" bed Avoidance of daily "bed crunch and overflowing to lessdesirable areas Increased patient empowerment—clear Decrease in salary expenses expectations for patients staff overtime Increased staff Proactive completion of empowerment—shared activities governance employed

#### Summary Expediting patient throughput has gained significant attention in Enhanced interdepartmental recent years in the emergency care and outpatient clinic arenas of health care. Little research exists on patient throughput in obstetrical Standardization in practice inpatient areas; however, this project has demonstrated that many of the same principles can be applied to improve process

flows, performance, communication, and overall efficiencies. While there remains a disparity in the healthcare setting, many positive results and benefits derived from expediting obstetrical patient throughput are evident.