

Labor and Delivery Realize Annualized Savings of \$94K, & Increases Bedside Time by 33%



The Problem

The Labor and Delivery unit at this 150-bed, for-profit hospital struggled to efficiently fill its role as the region's primary childbirth center. Staff and patients alike were frustrated by lengthy admissions and discharge processes, slow responses to requests for medication, and delays in transfers from delivery to recovery rooms. Exhausted nurses strained to provide quality care for the unit's burgeoning number of patients.

The LEAN Healthcare Solution

Through a one-week Kaizen event, HPP helped enthusiastic hospital staff evaluate the Labor and Delivery unit and eliminate inefficiencies that created barriers to patient care. The Kaizen team began with Current State Value Stream Mapping, plotting the entire labor-and-delivery process from the mother's arrival at the hospital to mother and baby discharge. The team then used process mapping and spaghetti diagrams to examine the process's specific components in greater detail.

These LEAN tools uncovered several critical inefficiencies:

1. spotty notification regarding patient eligibility for labor-and-delivery medications, leading to confusion and delays in filling time-sensitive prescriptions
2. poor communication between nurses and environmental teams, leading to confusion and delays regarding the need for and availability of recovery rooms
3. last-minute scheduling of time-consuming discharge-related procedures, such as lactation consultations and pediatric evaluations
4. inefficient layout of the admissions area and labor-and-delivery rooms, leading to a grueling per-patient average of 1.9 miles of travel required to complete routine nursing duties.

To remedy these inefficiencies, HPP led the Kaizen team in developing the Future State Value stream and associated A3's (Problem & Solution Document) in making several changes:

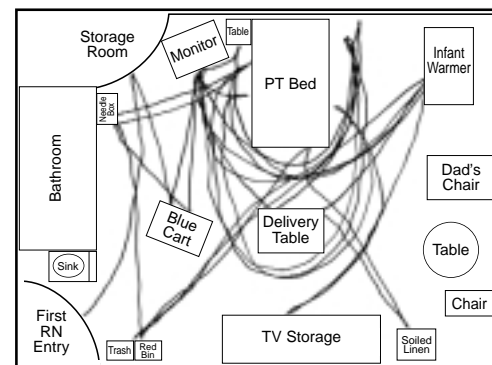
1. creation of standardized work and a standard operating procedure (SOP) that incorporates medication-eligibility notification into the admissions process.
2. creation of a new fax-back system and reestablishment of existing pager protocol to stabilize communication between nursing stations and recovery-room environmental teams

3. creation of standardized work practices requiring advance scheduling of discharge procedures and 24-hour advance initiation of those procedures and related paperwork
4. acquisition of rolling admissions computers and reconfiguration of a model labor-and-delivery room for efficiency and bedside care.

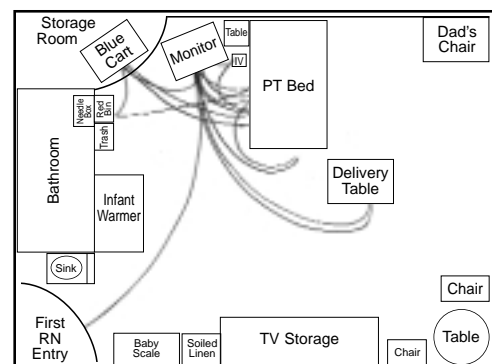
The Outcome

Improvements were swift and dramatic. They included:

- \$94,000 in annualized savings from process improvements, plus other long terms savings.
- Reductions in patient wait times, including a 1-hour reduction for admissions, a 1-hour reduction for medication, and a 3-hour reduction for discharge
- Reduction of nurses' per-patient travel to less than a mile, resulting in 33% more bedside time per nurse and reconfiguration of all labor-and-delivery rooms for better mother/baby care.



Spaghetti Diagram: Current State



Spaghetti Diagram: Future State

To discuss how HPP can assist with your LEAN HEALTHCARE journey or Six Sigma Implementation: Call 615-265-2002 or e-mail: chagood@hpp.bz www.hpp.bz