

# New procedure for community-acquired pneumonia patients reduces length of stay by 24%

## Pharmacy Management

### The challenge

When the administration of King's Daughters Medical Center became concerned over an above average length of stay for community-acquired pneumonia patients, Cardinal Health's pharmacy experts provided the solutions they needed to solve the problem.

### Background

Patients with community-acquired pneumonia were spending an average of 9.2 days at King's Daughters. Recognizing an opportunity for both improving patient care and reducing their antibiotics cost, the administration set a goal of reducing this time frame.

### Solution

Cardinal Health's pharmacy team played a pivotal role in the multidisciplinary committee assembled to address this issue. A thorough analysis revealed that the average elapsed time to community-acquired pneumonia patients' first dose antibiotic was 384 minutes (6.4 hours). Committee members agreed that if these patients were to receive their first antibiotic dose more promptly, this would be a key factor in shortening these patients' length of stay.

The pharmacy team reviewed strategies and constructed an action plan customized to King's Daughters' specific needs. First they implemented procedures to ensure that antibiotics were always available in the automated dispensing cabinets located at all nursing units, and confirmed that the entire

*(continued on reverse)*



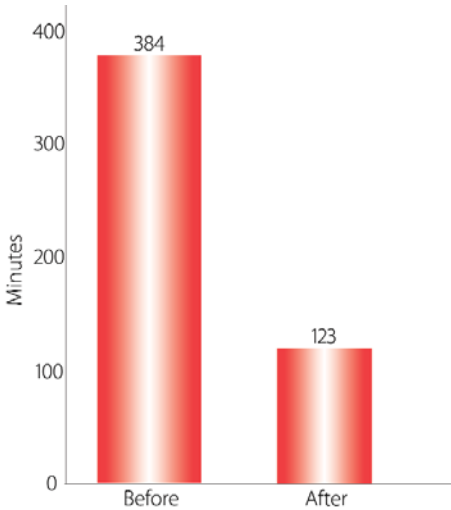
### What Cardinal Health Delivered:

- Improved patient care
- Reduced pharmacy and overall hospital costs
- Improved efficiency
- Improved rapport between pharmacy and medical staff



### Elapsed Time for First Dose Antibiotics

Before and After Initiative



pharmacy staff was aware of this initiative. They then educated the emergency and nursing departments on both the location of the antibiotics and the goal of prompt administration for community-acquired pneumonia patients.

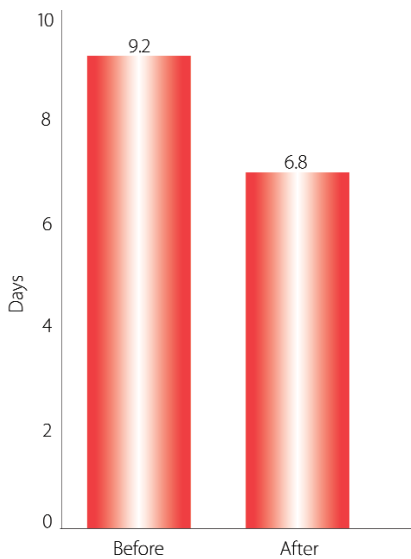
### Results

These new procedures reduced the average elapsed time to first dose antibiotic administration by 68% to 123 minutes (2.05 hours). The hospital's goal of reducing average length of stay for community-acquired pneumonia patients was achieved; average stay after the initiative was 6.8 days, a 24% reduction.

But the benefits didn't stop there. The initiative decreased pharmacy costs by approximately \$32,000 a year, and overall hospital costs by \$365,898 a year.

### Average Length of Stay

Before and After Initiative



### Savings to King's Daughters Medical Center

**\$32,000** in annual pharmacy costs

**\$365,898** in annual total hospital costs

The Pharmacy Management business of Cardinal Health has more than 35 years of expertise in helping hospitals and health care systems improve both the financial predictability of pharmacies and the quality of patient care. Through clinical utilization, workflow processes and effectively managing pharmaceutical inventories, our experts can improve the pharmacy practice and provide the benchmarks to measure success.



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