

# Using Lean Principals to Improve Patient Flow

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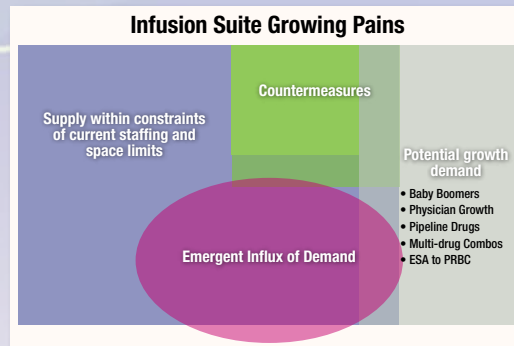
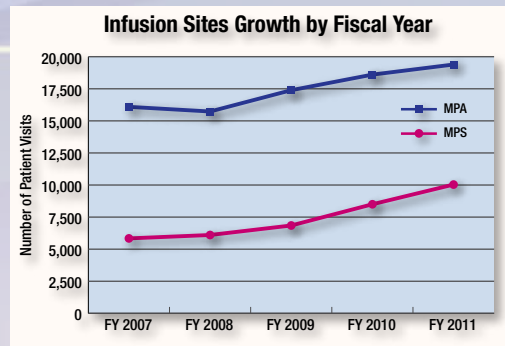
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## Background and Goals

- A multidisciplinary value stream was formed to improve chair utilization in a hospital based outpatient infusion center
- A clarified 2010 Department of Health regulation prohibited overflow of outpatients occupying an inpatient bed

## Existing Problems

1. Increased Volume
2. Increased complexity of therapies
3. Limited amount of space



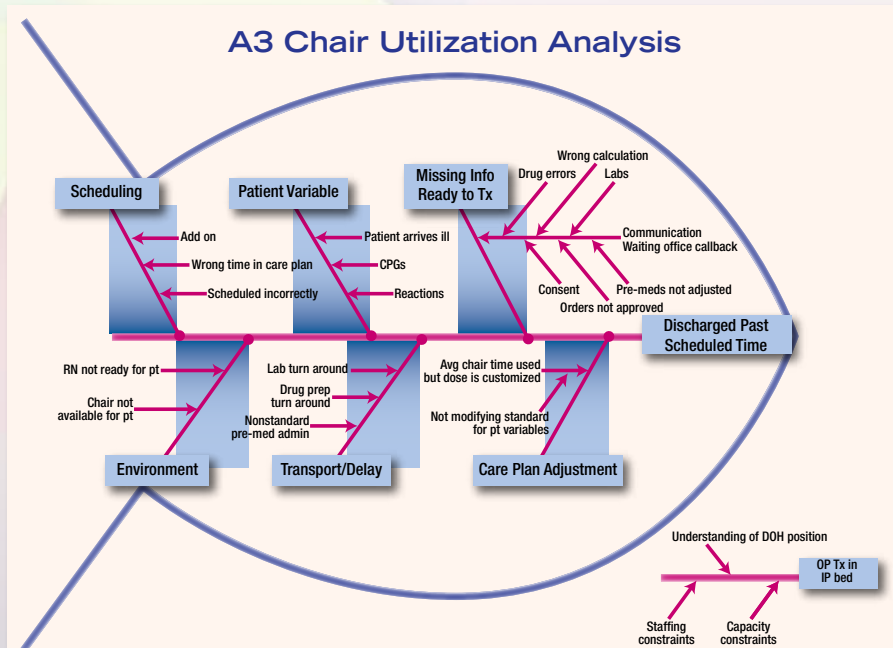
## Analysis of Current State

The ability to treat current patients and prepare for expected growth was a major concern.

Factors include:

1. Increase volumes of new cancer agents and complexity of administration for nursing
2. Growth in number of referring physicians to infusion suite
3. Increase in therapy for non-oncology diseases
4. Aging of baby boomers

In 2009 the infusion areas began to experience difficulty in scheduling patients at requested time. Data collected found this was a complex issue that could not be resolved by a single "silver bullet." Using a root cause analysis tool, the Fishbone, we identified the opportunities.



## Countermeasures

The Value Stream committee identified key areas to begin focusing on to improve patient throughput and satisfaction. Immediately, we needed to stop the use of inpatient beds for outpatients which resulted in a patient care manager spending most of her days rearranging patients schedules.

Other key areas identified were:

1. Patients being ready to treat
2. Create more efficient/creative staffing models
3. Addressing No show, cancels and same day add on's



## Results

The value stream continues to be a collaborative work in progress. As we continue process refinement, the patient must always be at the core of all improvement goals. We need to be vigilant of the patient experience.

1. Longer than scheduled- adjusted the chair time in our care plans to be more accurate which facilitated more patients being treated
2. Outpatient overflow- Decreased outpatient overflow from 493 in calendar year 2010 to 8 in June 2011
3. Pending Orders-still a work in progress. Physicians, nursing and pharmacy are working together so patients are ready to treat

