Accounting for changes in demand

Level-loading the schedule makes staffing needs more predictable

Stanford Health Care's steps to optimize their infusion center schedule

1

Identified challenges in infusion center:

- Long patient wait times

- Underutilization at certain times of day

- Excess nurse overtime

- Increasing nurse and patient dissatisfaction

2

Partnered with LeanTaaS to identify solutions to infusion center challenges

3

Deployed Lean and predictive analytics product, iQueue, that mines historical EHR data, understands operational constraints, and generates algorithmic templates that shape demand evenly throughout the day

4

Implemented Active Daily Management[1] that monitored performance and refined the algorithmic templates over a period of three months

The key to success

Stanford held numerous trainings with frontline staff to ensure they would be able to stick to the new scheduling templates and communicate the changes to patients

1) Lean system that allows you to deliver customer value through proper support and leadership to those who are closest to the process (customers and process owners).

Source: Stanford Health Care, Stanford, CA; LeanTaaS, Santa Clara, CA; Oncology Roundtable interviews and analysis.

Stanford Health Care

- 613-bed hospital located in Stanford, California
- Epic EHR

► Partnered with LeanTaaS to solve problems in the infusion center; LeanTaaS deployed iQueue, a Lean and predictive analytics product

► Stanford "book-ended" iQueue deployment with Lean process on one side and robust Active Daily Management on the other side to yield scalable and long-standing benefits

► Since implementation of scheduling template in 2013, infusion center appointments are now more evenly distributed across the day; Stanford has seen a 25% increase in nurse satisfaction, 50% decrease in nurse overtime, 31% reduction in wait times, and a 17% lower unit cost of service delivery, while accommodating 21% higher patient volumes

CASE
EXAMPLE

LeanTaaS

- Healthcare Lean and data science company based in Santa Clara, California

► Helps hospitals increase patient access with Lean and predictive analytics solutions

► Developed iQueue, a Lean and predictive analytics product that mines historical EMR data, understands operational constraints, and generates algorithmic templates that shape demand evenly throughout the day

► iQueue uses patented algorithms to forecast volumes, shape demand, and maximize resource usage, thus increasing patient volumes, decreasing wait times, and improving overall staff satisfaction

► For more information, visit: http://www.leantaas.com

Significant return on investment

Evenly distributing appointments leads to increased nurse satisfaction

Stanford's scheduling improvements since implementation

25% increase in
nurse satisfaction

50% percent decrease
in nurse overtime

81% decrease in emergency
callbacks per pay period

31% decrease in wait times
in infusion center

21% increase in
patient volumes

17% decrease in unit cost
of service delivery

Related resource available on advisory.com
The Scheduling Improvement Toolkit