

# Schedule Efficiency in a Urology Office

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# Schedule Efficiency in a Urology Office

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## Background

In the United States, specialty offices often have a large load of patients to see. Many patients often experience extended wait times to see these specialists thus decreasing their satisfaction of care. Schedule based analysis has been studied and shown to be a valuable use of resources for office efficiency. They have been shown to provide a framework for assessing change in clinic operations, identify mechanisms of inefficiencies, and identify possible points of improvement. Much research has been done in improving clinic time utilization however urology clinics have been noticeably absent in this body of literature. This study aims to identify the current state of schedule utilization in a Urology clinic at the Lehigh Valley Health Network.

## Problem Statement

What is the current state of schedule utilization effectiveness measured by new patient retention percentage in a Urology office?

## Methods

This internal designated quality improvement study did not require IRB approval. Using Microsoft Excel, data analysis was done. Target goal percent of new patients seen in fourteen days was compared to actual percent of new patient rate within fourteen days for the time period of September 2016 to November 2017. Schedule utilization was compared to new patient percentage rate as well. A ratio was created by comparing total new appointments to total appointments for each month in this time period. Average lead time (days between scheduling appointment and appointment) for new patient appointments was compared to schedule utilization. This was done for two separate sites and then averaged across both sites.

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## Results

### SITE A

- Average goal percentage of new patients seen within fourteen days was 74.31%
- Average actual percentage of new patients seen within fourteen days was 61.78%
- Goal percentage was 12.53% higher than the achieved percent

### SITE B

- Average goal percentage of new patients seen within fourteen days was 47.75%
- Average actual percentage of new patients seen within fourteen days was 49.04%.
- Achieved percentage was 1.29% higher than the goal percentage.

### COMBINED

- Average goal percentage of new patients seen within fourteen days was 61.03%
- Average actual percentage of new patients seen within fourteen days was 55.41%
- Achieved percentage was 5.62% lower than the goal percentage
- Average number of total visits per month was 1119.93
- Average number of new visits was 287.7
- 25.69% of total visits on average were new patient visits
- Average percentage new patient rate per month was 22.28%
- Overall average lead time was 17.54 days

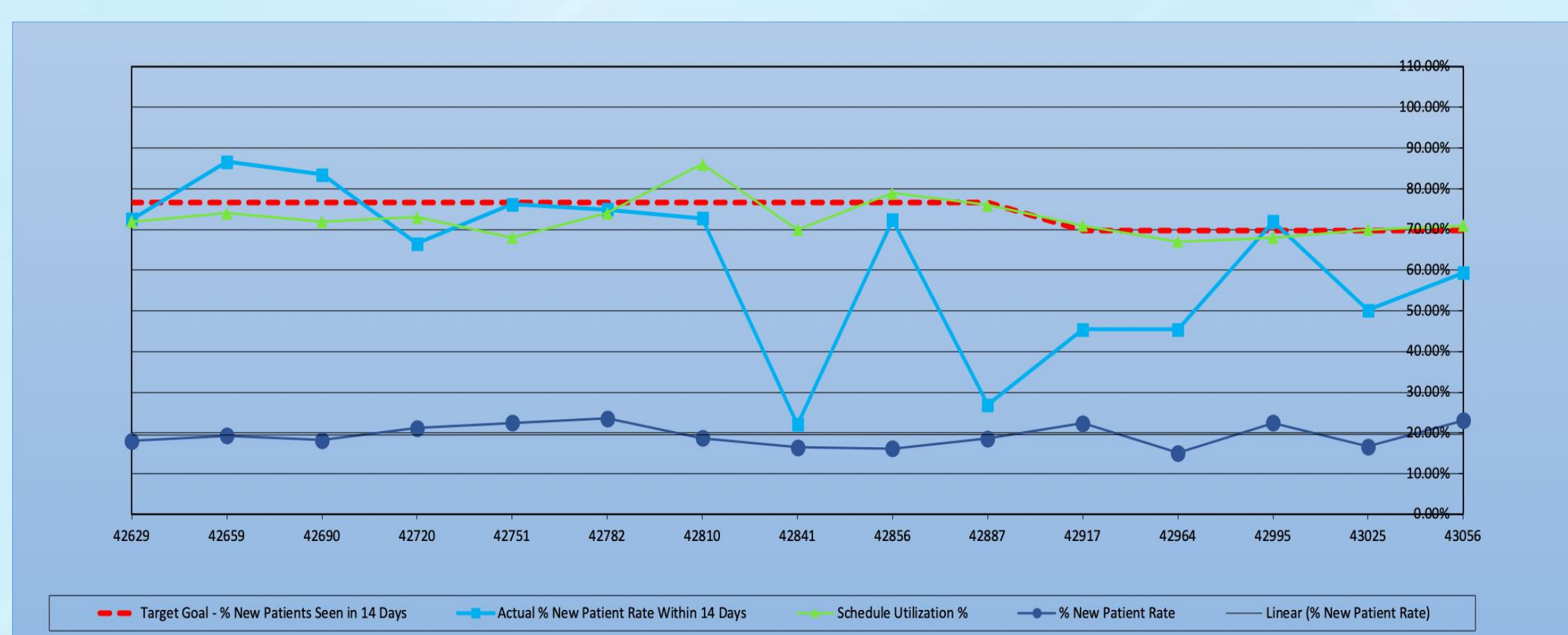


Figure 1: Access data for site A

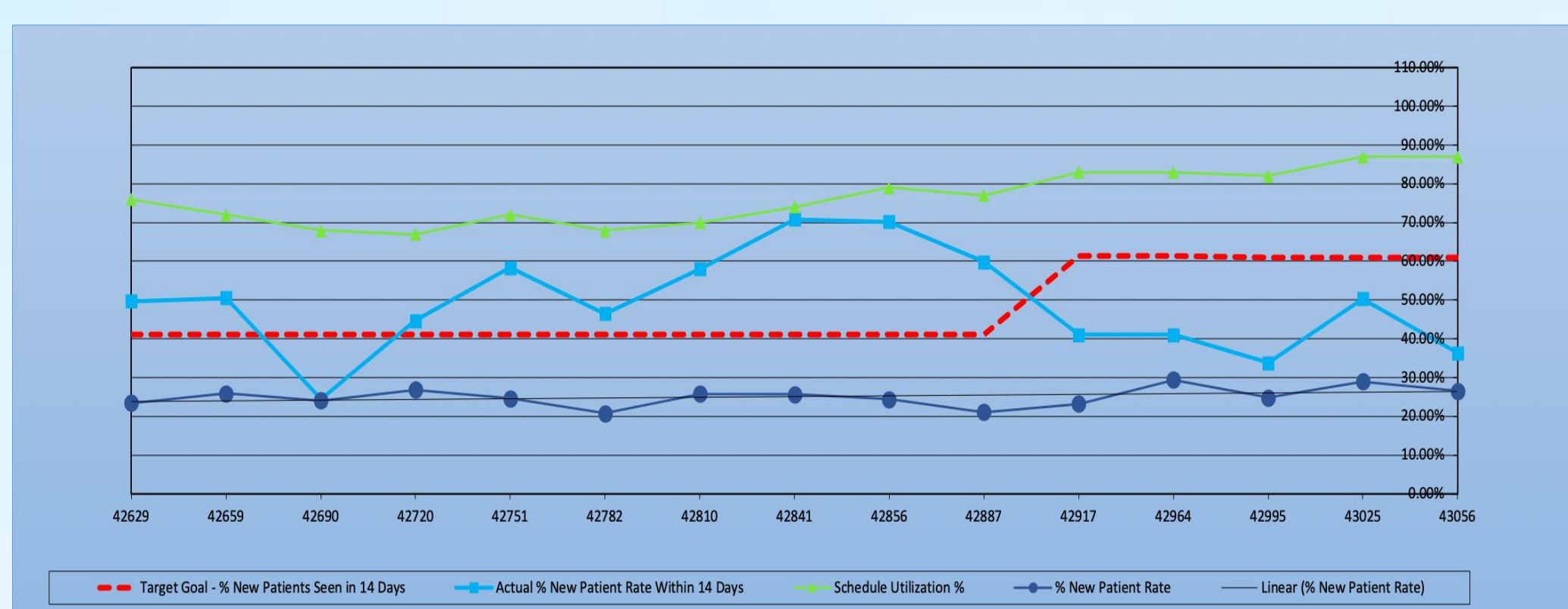


Figure 2: Access data for site B

## Discussion

### Project Relationship to SELECT Principles

Values Based Patient Centered Care is integral to this project. This project sought to define the current state of time efficiency within a urology clinic office. This goal is meant to enhance patient centeredness and focus on patient values in the clinic, thus generating greater patient satisfaction and overall better care. Evaluating the efficacy of the Urology office is key to improving the health system. The Urology offices are an integral part of the health LVHN health system and analyzing their time effectiveness and patient retention capabilities will allow for building upon the infrastructure of an effective health system.

### Project Relationship to Proposed Goals and Objectives

This study fulfills the proposed goals and objectives of defining the current state of patient retention. In so doing it allows for the identification of key factors that have can be improved upon to increase time effectiveness in the urology office.

### Project Limitations

Future iterations of this study would include longer term data collection. Another could look at strategies to create sustained improvements. Developing a long term strategy for sustaining efficiency improvements is pivotal to the long-term benefit of these types of programs [8]. One study found key strategies of developing leaders, creating incentives, developing information systems, and managing performance helped to create a culture for sustaining these wait time reducing initiatives [8]. Subsequent studies could also be performed to evaluate for the efficacy of such culture developing programs and their long-term effect on sustained improvement.

## Conclusions

The current state of the LVHN Urology Offices was illustrated with these analyses. Overall the average lead time site-wide was 17.54 days. Percentage of total visits that were new patient visits was 25.69%. Overall the goal percentage of new patients seen within fourteen days was greater than the achieved percentage. This shows room for improvement in schedule utilization.