

## Case Study



A Unique Big Data  
**Workforce Strategy Solution**

## OUR CHALLENGE

A major East Coast Academic medical center was challenged to better and more optimally deploy the overall workforce in the 60,000+ visit per annum Emergency Department. ED physicians, nurses, nurse practitioner, techs and support staff were all executing to different strategies and not using a common set of tools. All job classes were unable to effectively and consistently deploy the necessary workforce to meet patient demand. Likewise, all different job classes (Dr. / Nurses / NPs / etc.) were using different scheduling applications or none at all.

Academic Medical Center needed to move away from intuitive based decision making to evidence based decision making with respect to workforce deployment.

## OUR SOLUTION

Using the underlying optimization algorithms embedded into the technology platform from The Optimé Group, senior physician administrators and nursing leadership in the ED took a holistic view of the volume of patients expected on a seasonal, monthly, weekly and even hour by hour basis – demand planning. From this foundation, strategies were created that factored in the necessary care to be delivered, by job type, to meet that patient demand. For the first time, all of the job classes are using the same sets of demand planning data, an agreed set of productivity metrics and a common set of scheduling tools. Gone are the days of having too many physicians scheduled and not enough nurses for a given shift or even given hour of the day. No longer are clinicians wondering why support staff begin their shifts are seemingly random hours and not as patient demand requires

Reduction in misalignment – when either too much or too few staff have been scheduled to meet patient demand – has provided tremendous benefits!

## OUR IMPACT

- Misalignment – +/- 3% is down from +/- 15%
- Staff Satisfaction – 92% express that schedules are good and fair
- Schedule Desirability – 94% assignments to most preferred shifts
- Managers Time – 80% reduction of time spent on staffing and scheduling
- Cost of Unit of Service – reduced by 5.1%

A regular and consistent dialogue has been created between Optime and the leadership of the Emergency Department so that 'real time' adjustments can be made as:

- Patient Volumes change
- New ideas regarding clinical care deployed – triage nurse / urgent care
- Improved productivity benchmarks are adopted

## Cost per UOS reduced by 5.1%