

Process Improvement Initiatives in Patient Access Services

Sarah Kalavoda
East Stroudsburg University of Pennsylvania

Joseph Hwang
Lehigh Valley Health Network

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Process Improvement Initiatives in Patient Access Services

Sarah Kalavoda, Joseph Hwang, MHA
Lehigh Valley Health Network, Allentown, Pennsylvania

Background

- Improving efficiency is essential for successful health network operations. This project, Process Improvement Initiatives in Patient Access Services, focuses on analyzing call volume data for the Patient Access Services Department to identify opportunities for improvement.
- Metrics for this project are percent service level, abandoned rate, and average answer delays. Department growth is measured by examining the ratio of inbound vs. outbound calls, as well as the number of accounts created and procedures scheduled.
- Addressing these concerns allows the network to increase productivity, control costs, and provide the best service possible to our patients. This project follows LEAN principles to track the department's progress toward network goals.
- Additional analysis shows peak hours for call volumes and where additional staffing can be used to improve efficiency during these times.

Methodology

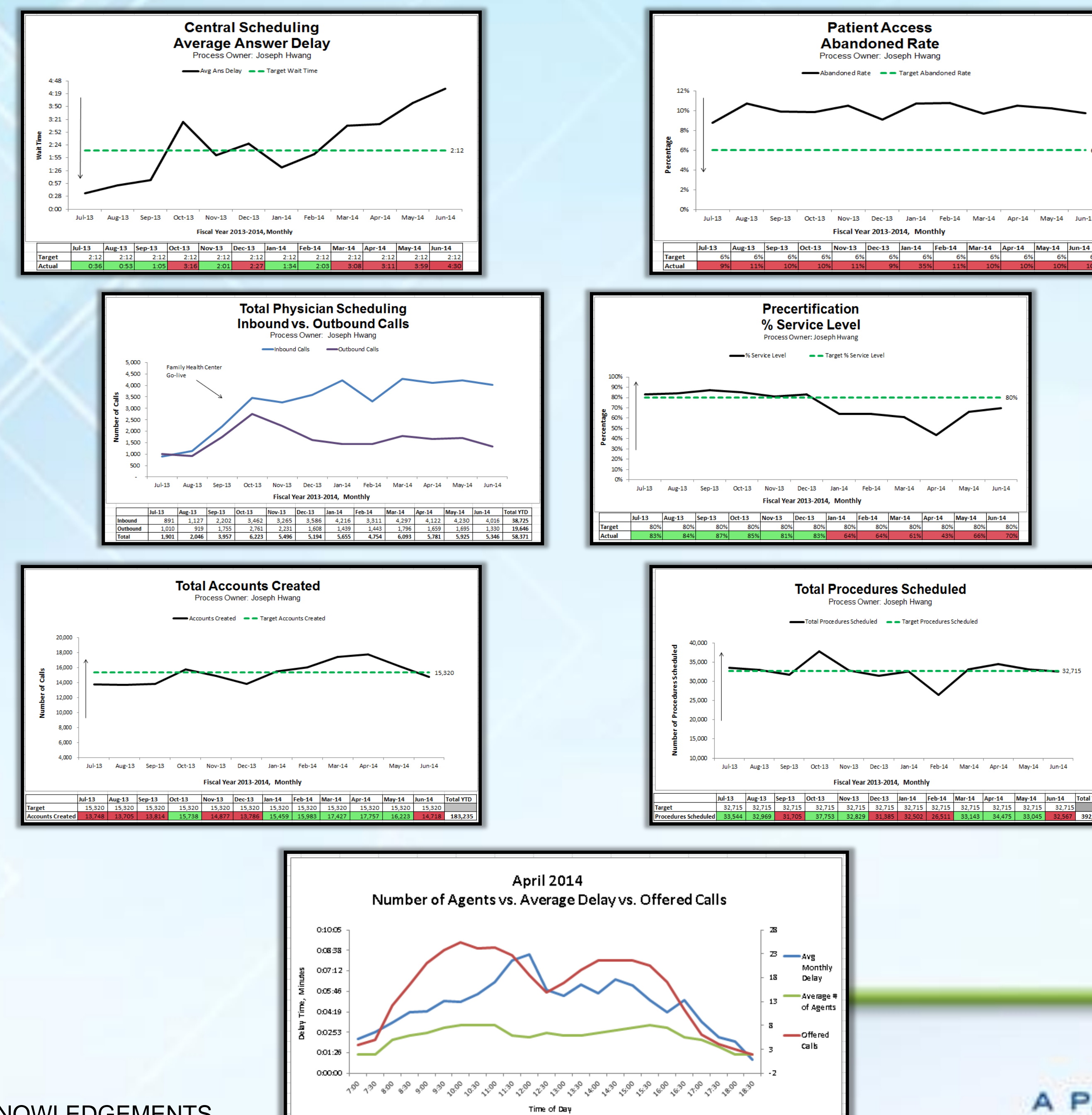
- Data was collected using call center software called Avaya. The data was pulled from reports and placed into a Microsoft Excel document. Each department was categorized by offered calls, answered calls, outbound calls, abandoned rate, percent service level, average answer delay, and accounts per month.
- To visually represent the results and trends, the data was converted into MS Excel charts. Goals for all categories were set. Months that met department goals were displayed in green, and months that did not meet goals were colored in red.
- Finished data analyses was printed and displayed as a visibility wall in the department, measuring the department's metrics against network metrics for FY14 of People, Service, Quality, Cost, and Growth. Service was measured based on patient wait times, while Quality was measured by the results of percent service level and abandoned rate. Additionally, Growth was measured by examining the number of accounts per month and the number of procedures scheduled.
- Additional case study data analysis examined the staffing ratios during peak call hours for the Central Scheduling Department for April 2014. The data pulled was calculated to show the average number of agents scheduled for each day and the times they worked in 30-minute intervals for the entire month. This data was then converted into a graph and measured against average monthly answer delay to determine peak hours and where additional staffing is needed to improve efficiency.

Selected Results

Data

402-TEST Call Center Report												
Pre-certification	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14
Offered	1,183	1,178	1,112	1,227	1,125	1,004	1,185	934	1,198	1,304	1,202	1,170
Answered	1,100	1,078	1,052	1,152	1,025	899	1,011	838	1,028	1,156	1,070	1,062
Abandoned Rate	4,908	5,049	4,716	5,105	5,029	4,911	5,510	4,488	5,141	5,794	5,215	4,595
% Service Level	7%	8%	5%	8%	9%	6%	15%	10%	14%	11%	11%	9%
Avg Ans Delay	0.12	0.14	0.11	0.11	0.14	0.14	0.25	0.23	0.25	0.28	0.23	0.23
Accounts per Month	9,418	9,290	9,091	10,541	9,505	9,571	10,349	9,395	10,352	11,622	10,534	9,957
Central Scheduling												
Offered	14,487	14,398	14,242	17,587	14,100	13,829	15,231	13,859	16,211	16,897	16,099	15,457
Answered	13,569	13,275	12,985	13,975	12,185	11,467	13,043	12,037	13,411	14,057	12,970	12,342
Abandoned Rate	7,919	7,141	6,782	6,885	7,364	7,388	8,206	6,801	6,560	5,318	5,091	5,091
% Service Level	6%	8%	9%	20%	14%	17%	10%	13%	17%	19%	19%	20%
Avg Ans Delay	0.36	0.53	1.05	3.16	2.01	2.27	1.34	2.03	3.08	1.71	3.59	4.30
Patient Access												
Offered	1,415	1,419	1,304	1,584	1,380	1,279	1,543	1,335	1,518	1,507	1,473	1,408
Answered	1,292	1,287	1,175	1,428	1,235	1,163	1,467	1,192	1,371	1,349	1,322	1,271
Abandoned Rate	960	995	885	764	731	576	918	648	534	519	428	531
% Service Level	81%	78%	78%	75%	72%	72%	37%	35%	40%	61%	41%	45%
Avg Ans Delay	0.16	0.16	0.17	0.23	0.19	0.25	0.31	0.33	0.32	0.25	0.38	0.31
Accounts per Month	4,330	4,415	4,723	5,197	5,372	4,215	5,110	6,587	7,075	5,935	5,689	5,651
Physician Scheduling												
Family Health Center												
Offered			1,781	3,191	3,606	3,114	3,655	2,809	3,560	3,624	3,534	3,430
Answered			1,208	2,298	2,204	2,542	3,017	2,366	3,034	2,979	2,954	2,904
Abandoned Rate			880	1,742	1,293	844	669	633	682	553	638	379
% Service Level			32%	28%	27%	19%	17%	15%	15%	16%	16%	16%
Avg Ans Delay			3.15	2.47	4.02	1.41	1.22	1.27	1.24	1.41	1.32	1.41
Central Scheduling												
Offered	952	1,295	1,379	1,440	1,384	1,366	1,576	1,268	1,694	1,500	1,538	1,534
Answered	891	1,127	994	1,164	1,001	1,043	1,199	945	1,263	1,144	1,276	1,212
Abandoned Rate	1,010	919	895	1,019	938	764	770	810	1,114	1,156	1,057	951
% Service Level	6%	13%	28%	19%	28%	24%	24%	25%	22%	24%	17%	21%
Avg Ans Delay	0.20	0.40	1.45	1.19	2.10	1.30	1.47	1.55	2.03	1.52	1.27	1.34
Total Physician Scheduling												
Offered	952	1,295	1,380	4,631	4,990	4,480	5,231	4,077	5,254	5,124	5,072	4,964
Answered	891	1,127	2,202	3,482	3,265	3,586	4,215	3,311	4,297	4,122	4,230	4,016
Abandoned Rate	1,010	919	1,755	2,761	2,231	1,008	1,439	1,443	1,796	1,659	1,695	1,330
% Service Level	6%	13%	30%	25%	35%	20%	19%	19%	19%	20%	17%	10%
Total												
Inbound	18,110	18,372	19,877	25,897	21,676	20,664	23,388	20,307	24,301	24,956	23,962	22,999
Outbound	14,797	14,104	13,938	15,515	15,355	14,681	16,073	13,569	14,272	14,532	12,956	11,547
Total Call Volume	32,907	32,476	33,815	40,612	37,031	35,345	39,461	33,876	38,573	39,488	36,918	34,546
Accounts Created	13,748	13,705	13,814	15,738	14,877	13,786	15,459	15,983	17,427	17,757	16,223	14,718
CS PMS Procedures Scheduled	33,544	32,989	31,705	37,753	32,829	31,395	32,502	28,511	33,143	34,475	33,045	32,587

Interpretation



Discussion: Data Highlights

- Opportunities for improvement can be seen in Central Scheduling's average answer delay. June had the highest average answer delay of 4:30, possibly due to the number of employees on PTO.
- On the physician scheduling side of Central Scheduling, a clear increase in workload can be seen in September with the addition of Family Health Center to the department.
- Total accounts created for the entire Patient Access Services department clearly show the department's growth in just a year's time.
- When examining the total procedures scheduled, there is a sharp decline in February. Factors that could have contributed to this were the harsh winter weather and the fewer number of days in this month.
- In the case study of the Central Scheduling staffing ratios data for April 2014, a relationship can be seen between average number of agents, number of offered calls, and average monthly delay. During peak call times of 10AM-3PM, average delay increases. Average delay also spikes up around 12PM even though there is a drop in offered calls because fewer agents are on the phones due to scheduling or lunch breaks. To solve this problem, more agents are needed during peak call times.

Conclusion and Future Plans

- Overall, the data conversion into graphs for the department's visibility wall was a success in that it allows for easy tracking of metrics. It also allows for the easy identification of improvement opportunities that can be used to foster problem-solving and team building within the department.
- The data's depiction of departmental growth illustrates the need for additional employees.
- The onboarding of new hires as of July FY15 will alter the data for future months. The department is expecting to see improvement in all patient access areas due to this staffing increase. Additional data for FY15 is needed to measure the results of this hypothesis.
- These process improvement initiatives have a direct impact on the department's key stakeholders. Increasing service level will also have a positive impact on patient satisfaction and retention. This will also help the network financially in keeping and attracting more patients and creating a positive view of the network.

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