CENTRAL FLORIDA EXPRESSWAY AUTHORITY

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CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Customer Contact Center Performance Assessment

January 2019

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EXECUTIVE SUMMARY

Overview

In accordance with the 2019 Internal Audit Plan, Protiviti conducted a follow-up assessment of the Central Florida Expressway Authority (CFX) customer contact center operation's performance leveraging a contact center subject matter expert. The last performance assessment was performed in February 2017.

The CFX E-PASS customer service centers and violations enforcement operations services are outsourced to a third party vendor under a five year contract with an additional five, one year renewal options. Under the agreement, the third party vendor provides the trained personnel necessary to operate the customer service centers, including the phone center. CFX provides the primary software and systems for processing customer accounts and transactions, the Interactive Voice Response system (IVR), web site, and Violation Enforcement System (VES) image review software. CFX also provides management oversight of the customer service center operations.

The customer contact phone center currently leverages a total of 82 full and part-time agents, excluding image processing personnel, five supervisors, and a call center manager to support the customer contact center operations. For the period reviewed from October 2018 through November 2018, the average daily call volume was approximately 4,244 calls per day, which is almost twice the average daily call volume of 2,400 calls per day during the fiscal year 2017 assessment. The increase in call volume was primarily due to E-PASS and SunPass customers requesting information related to a SunPass invoicing backlog that occurred during the second half of calendar year 2018.

The call volume follows a consistent pattern, with volume peaks in the morning and late afternoons and the highest volumes occurring on Mondays and Fridays. The customer contact center services consist of Pay By Plate payments (30%), customer service (38%), Violation Enforcement System (VES) response line (18%), account replenishments (6%), Spanish, which encompasses all call types (7%) and new E-PASS accounts (1%).

The technology used in the customer contact center is based on an Avaya 8700 platform that is implemented in a configuration using multiple physical data centers. The contact center's summarized historical performance data is retained for at least 12 months. However detailed level performance data is retained for approximately 60 days. CFX implemented Monet Workforce Management in January of 2017 and a new SwampFox IVR (Intelligent Voice Response) solution in June of 2016. These tools enable CFX to more effectively route calls, match agent staffing levels to call volume patterns and forecast agent scheduling needs.

EXECUTIVE SUMMARY

Objectives

The objectives of the review were to:

- Perform an assessment of the customer contact center performance.
- Evaluate key performance indicators.
- Follow-up on areas of concern identified during the last customer contact center assessment in fiscal year 2017.

Approach

The Contact Service Center Performance Review was completed through a series of four phases that include data gathering, data analysis, process and organizational review, and recommendations and findings development.

Phase I – Data Gathering

Phase I of the project was performed by requesting and obtaining statistical data from various sources including the ACD system, Monet, and Quality systems in order to complete a statistical analysis of contact center performance for the period of October 2018. Data gathered was analyzed and collated in Phase II and later incorporated into audit findings and recommendations.

Phase II – Data Analysis

During Phase II of the audit, the statistical data gathered was analyzed to evaluate the performance of the contact center operation. Key measures such as call volumes and patterns, service levels, quality, and schedule adherence were evaluated and documented to measure performance. In additional the statistical analysis was compared to the results of the last contact center assessment performed in fiscal year 2017.

Due to the usually high call volume during October 2018, as compared to the last time the assessment was performed in 2017, additional data was requested for the month of November 2018 to determine if the call volume remained consistent.

EXECUTIVE SUMMARY

Approach (cont.)

Phase III – Process and Organizational Review

The process and organizational component of this review was designed to analyze, document, and quantify the customer contact center ’s application of people, process, and technology to provide customer service

- People: Executive, Operations, IT, and Contact Center Management Interviews
- Process: Detailed Contact Analysis leveraging statistical data and historical reporting obtained and analyzed in Phases I and II
- Technology: Infrastructure and Application Review

Phase IV – Findings and Recommendations Development

Internal Audit summarized the observations and enhancement opportunities identified during the assessment.

EXECUTIVE SUMMARY

FY 2019 vs FY 2017 Call Handling Performance

The chart below provides a comparison of key call handling performance metrics for the period reviewed in 2019 as compared to the period reviewed in 2017.

Performance indicator	Oct 2018	Nov 2018	FY 2017 Assessment Period *	Change
Contact Center Agents (FTE)	82	82	57	44% increase
Average Daily Call Volume	4,448	4,041	2,400	68% increase
Average Speed of Answer	86.6 seconds	62.8 seconds	36 seconds	74% increase
Abandoned Call Rate	8.1%	5.7%	6% – 10%	43% decrease
Average Auxiliary Time Rate	23%	Not Available	28%	18% decrease
Average Talk Time	316.5 seconds	316.6 seconds	237 seconds	34% increase

*Includes call data for the period of January 2017 through February 2017.

CFX experienced unusually high call volume in October and November 2018. This was primarily due to SunPass and E-PASS customers contacting the CFX customer contact center to obtain information and assistance with backlogged SunPass toll charges that resulted from a recent SunPass system upgrade. Although CFX is not affiliated with SunPass, due to the interoperability relationship between the two agencies the CFX contact center agents provide SunPass customers with applicable information when possible. During the period reviewed from October 2018 through November 2018, the CFX's contact center received approximately 30,000 calls from SunPass customers and converted 1,100 SunPass customers to E-PASS accounts.

The increased call volume, in addition to marketing and communication efforts to increase the number of E-PASS customers, negatively affected the Average Speed of Answer and the Average Talk Time for the period reviewed. However, CFX saw an increase in the E-PASS customer base of 29%, or 97,000 customers, since the last assessment in 2017.

EXECUTIVE SUMMARY

Summary of 2019 Observations

Although the Sunpass billing issues lead to unusually high call volumes over the period of audit and the high call volumes impacted CFX's call handling performance, CFX quickly adapted by increasing staffing, redeploying staff, and modifying over-the-phone marketing efforts. Overall, the contact center's performance levels were considered good given the circumstances.

While performing the 2019 performance assessment, Internal Audit identified four observations and enhancement opportunities for CFX to consider. The related recommendations outlined below could help CFX make incremental improvements to call handling performance when unexpected events occur. Internal Audit classified the findings using a relative priority of high, medium, or low to provide management with a basis for evaluating them in the overall context of this report.

Observation #	Observation:	Relative Priority
Observation #1: Agent Utilization	While CFX is generally achieving its schedule adherence goals according to Monet reports provided, opportunities exist to improve overall agent utilization, which would increase agent's availability to answer more calls with the same number of agents.	*Medium*
Observation #2: Call Abandon Rates	Although call abandonment rates of 5% to 8% improved (decreased) as compared to the period of last assessment, abandonment rates of 5% to 8% are above the contractual service level target of less than 5%. Call volumes were abnormally high during the period reviewed due primarily to recent issues with SunPass and related services calls received by CFX.	*Medium*
Observation #3: Intelligent Voice Response (IVR) Solution	There is opportunity to improve the reporting used to monitor IVR (Intelligent Voice Response) utilization. Although the new SwampFox IVR solution implemented in June of 2016 has been very effective at segmenting customers and completing some automated self-service, the current reporting makes it difficult to ascertain how calls are flowing through the IVR, what paths these calls are taking, and where improvements could be made to the IVR to increase service automation.	*Medium*
Observation #4: Business Intelligence/Data Analytics	CFX could further improve its ability to monitor and manage the centers operation by making contact center data available in highly-consumable analytics dashboards, particularly dashboards designed to provide historical data for trend analysis and dashboards designed to provide real-time data for intraday management.	*Medium*

DETAILED OBSERVATIONS

DETAILED OBSERVATIONS

Observation 1 – Agent Utilization

Relative Priority: ***Medium***

Auxiliary (aux) time reporting captures the time agents spend in typically non-productive work states such as break, lunch, etc. Data collected in the Avaya Auxiliary reports shows that customer contact center agents spent 23% of their staffed time in auxiliary states. Although the overall Average Auxiliary Time Rate decreased 5% from 28% to 23% in FY2019, the industry average for auxiliary time is between 15% – 20%. While 47% of the agents average below 20% auxiliary time, 53% of the agents appear to routinely spend an average of 30% of their staffed time in various auxiliary states.

Oct 2018 Auxiliary Rates		
Agents < 16% Aux	Agents between 16% - 20%	Agents > 20% Aux
15 agents/18%	24 agents/29%	43 agents/53%
Average Aux	Average Aux	Average Aux
14%	18%	30%

Feb 2017 Auxiliary Rates		
Agents < 16% Aux	Agents between 16% - 20%	Agents > 20% Aux
34 agents/60%	3 agents/5%	20 agents/35%
Average Aux	Average Aux	Average Aux
10%	17%	64%

CFX uses a 30% auxiliary time model within Monet Workforce Management. The above data suggests that while overall agents may be within the overall 30% aux time on a daily basis, there is an opportunity to improve auxiliary time usage and therefore agent utilization to align with the industry average.

DETAILED OBSERVATIONS

Observation 1 – Agent Utilization (continued)

Recommendation:

Management should consider adjusting the auxiliary time model within Monet Workforce Management to 20% and assess the impact to the staffing requirements. Additionally, auxiliary time usage throughout the day should be monitored to identify agents with auxiliary time in excess of the target. Coaching should be provided to those agents to improve their utilization.

Management Response:

Management concurs.

Management Action Plan:

CFX Toll Operations staff will work with the third party vendor to adjust the auxiliary time model within Monet Workforce Management to 20%, assess the impact to the staffing requirements and manage staffing levels for schedule adherence.

Action Plan Owner / Due Date:

David Wynne, Director of Toll Operations / June 30, 2019

DETAILED OBSERVATIONS

Observation 2 – Call Abandon Rates

Relative Priority: ***Medium***

The call abandon rate was 5% to 8% in FY 2019 and 6% to 10% in FY 2017. Although this is a positive trend, the abandon rates are higher than the contractual service level target of less than 5%. In addition, the average speed of answer increased by 74% to 62.8 seconds, with monthly average speed of answer for October 2018 and November 2018 over 60 seconds for the Spanish, customer service and VES queues. The high average speed of answer in these queues may be negatively impacting the abandon rate.

Recommendation:

CFX management should evaluate the current staffing levels and the need for additional full/part time staff to provide additional call handling resources, including the need for additional Spanish speaking agents. In addition, improving the agent auxiliary rates should help to improve upon current average speed of answer and call abandon rates.

Also, management should ensure the appropriate staffing levels are maintained after the Orlando Airport Visitor Toll Pass Program is opened in May 2019 and agents are reallocated to that center. It is possible that abandon rates and wait times will peak if resources are not appropriately staffed or are lost.

DETAILED OBSERVATIONS

Observation 2 – Call Abandon Rates (continued)

Management Response:

CFX management is constantly evaluating staffing levels and making adjustments as needed that are supported by budget dollars, facility capacity and current business conditions. Currently the E-PASS Call Center facility is at the maximum capacity and additional positions can not be easily added without major facility adjustments.

Management Action Plan:

CFX staff will work with the third party vendor to adjust the auxiliary time model within Monet Workforce Management and possibly implement schedule adjustments to provide efficiencies in call handling, thus reducing the abandon rate.

Long term, CFX is looking into options to expand call center operations, including opening another call center location and recruiting more bilingual staff to assist a growing Spanish speaking demographic.

Action Plan Owner / Due Date:

David Wynne, Director of Toll Operations / December 31, 2019

DETAILED OBSERVATIONS

Observation 3 – Intelligent Voice Response (IVR) Solution

Relative Priority: ***Medium***

In June 2016, CFX implemented an IVR solution from Swampfox to identify callers, direct calls, and automate common functions such as payment of toll violations. At the time of this assessment, the IVR solution was having a significant impact on the center, deflecting 40% to 50% of the calls that would have otherwise required agent assistance to complete. By servicing callers in the IVR, CFX is completing the transactions more rapidly, while simultaneously reducing the number of agents required to handle customer contacts.

While the IVR solution has been very effective, the reporting used to monitor IVR utilization could be improved. The current reporting makes it difficult to ascertain how calls are flowing through the IVR, what paths these calls are taking and where improvements could be made to the IVR to increase service automation.

Recommendation:

CFX should consider working with Swampfox to develop Call Path Reporting so the use of the IVR can be more effectively monitored and improved over time. Implementing Call Path Reporting would allow CFX to track the path of calls through the IVR by showing the following:

1. Show all paths taken through the IVR by calls for a given reporting period, including the total number of calls that used the path and the percentage of total calls that took the path.
2. Service automation utilization – this reporting shows the total number of calls that attempted to utilize each servicing module (e.g. provide payment locations or accept payment), the number that completed successfully, the number that abandoned in the transaction (without completing), the number that completed the transaction, the number that ended the call/abandoned after completing, and the number that opted to an agent.
3. Error reporting – listing/count of all calls that were forced to either abandon or op—out to an agent due to a specific error such as payment failure, web service failure, etc. by failure type and “node”.

As a next step, CFX should develop a roadmap or strategy for developing and utilizing call path reporting to understand the path customers take in the IVR and identify opportunities to improve the IVR to increase service automation.

DETAILED OBSERVATIONS

Observation 3 – Intelligent Voice Response (IVR) Solution (continued)

Management Response:

CFX is in the process of making changes to the tolling operations system. The new toll operation system will likely require modifications be made to the IVR.

Management Action Plan:

CFX will develop a roadmap or strategy to update and modernize the IVR as it is integrated with the new tolling operations system.

Action Plan Owner / Due Date:

Jim Greer, Director of Information Technology, and David Wynne, Director of Toll Operations / June 30, 2020.

DETAILED OBSERVATIONS

Observation 4 – Business Intelligence/Data Analytics

Relative Priority: ***Medium***

Through the changes and improvements CFX has made to its organizational structure, QA programs, and Workforce management, CFX currently has easy access to accurate and complete historical data related to performance as well as real-time (and near real time) data from its various platforms. While this complete data is available via various historical reports, it is not generally available to the broader contact center team (agents and supervisors) or to the management team.

Additionally, CFX retains summarized contact center operation historical data over 12 months. However, detailed level data is only retained for 60 days. This limits the ability to perform lookback and trend analysis at detailed levels, such as intraday time periods or agent performance levels.

Recommendation:

CFX could further improve its ability to monitor and manage the center's operation by making contact center data available in highly-consumable analytics dashboards, particularly those designed to provide historical data for trend analysis and those designed to provide real-time data for intraday management. The use of highly visible dashboards showing real-time performance often enables a management team to more readily identify and respond to conditions in the contact center which may require immediate attention (unanticipated call volumes, service level issues, etc.) and improve overall service.

The Avaya ACD and the Monet Workforce Management systems store data needed to create these dashboards and wallboards. However, these tools do not have a visual studio functionality to design dashboards in a consumable, user-friendly presentation. Management should consider a visual studio product to provide the functionality to create the dashboards.

The process of setting up and implementing business analytics and related dashboards typically follows the approach outlined below:

1. Identify the data and Key Performance Indicators (KPI) that should be presented and/or trended for performance monitoring
2. Agree upon how these Key Performance Indicators will be measured and calculated
3. Determine source data/systems responsible for producing or providing data required to support analytics
4. Design and set up a repository for data to be managed in the analytics solution
5. Design Dashboard UI's including all visualizations, filters, and drill-downs
6. Implement dashboards in the center. Examples are provided in Appendix B.

DETAILED OBSERVATIONS

Observation 4 – Business Intelligence/Data Analytics (continued)

Additionally, in order to retain a larger amount of historical data, CFX should consider off-boarding its CMS data to an external database that can retain the data for at least 13-months.

Management Response:

CFX is in the process of making changes to the tolling operations system, which may improve CFX's toll operations reporting and dashboard capabilities.

Management Action Plan:

As CFX pursues the new tolling operations system, CFX will perform a cost analysis to evaluate the cost of capturing detailed level data for 13 months. In addition CFX will develop a roadmap for designing dashboards and reports that contain pertinent information, performance indicators and trend analysis in a user-friendly presentation.

Action Plan Owner / Due Date:

Jim Greer, Director of Information Technology, and David Wynne, Director of Toll Operations / June 30, 2020.

APPENDIX A

Status of FY2017 Recommendations

EXECUTIVE SUMMARY

Summary of 2017 Observations

Overall, CFX has improved the effectiveness and efficiency of the customer contact center operations since the time of the last review in 2017. The table below provide a summary of the progress made toward implementing the prior recommendations made during the 2017 call center performance review:

Observation #	FY17 Recommendations	Status of FY17 Recommendations
Observation #1: Service Level Performance	While CFX is doing a very good job of maintaining overall service levels, it appears that there is a consistent issue maintaining service level at the end of shift (beginning around 4 to 4:15 PM each day) due to the number of agents going off shift at this time of day.	CFX made adjustments to their schedules, particularly at end-of-shift to provide greater coverage, which fully addressed this observation.
Observation #2: Business Analytics / Performance Monitoring	CFX could further improve its ability to monitor and manage the centers operation by making contact center data available in highly-consumable analytics dashboards, particularly those designed to provide historical data for trend analysis and those designed to provide real-time data for intraday management. The use of highly visible dashboards showing real-time performance often enables a management team to more readily identify and respond to conditions in the contact center which may require immediate attention (unanticipated call volumes, service level issues, etc.) and improve overall service.	CFX has not yet created a business analytics solution to support real-time monitoring and analysis of call volumes, distribution, and agent performance monitoring. This recommendation is repeated in 2019. See 2019 observation #4.

EXECUTIVE SUMMARY

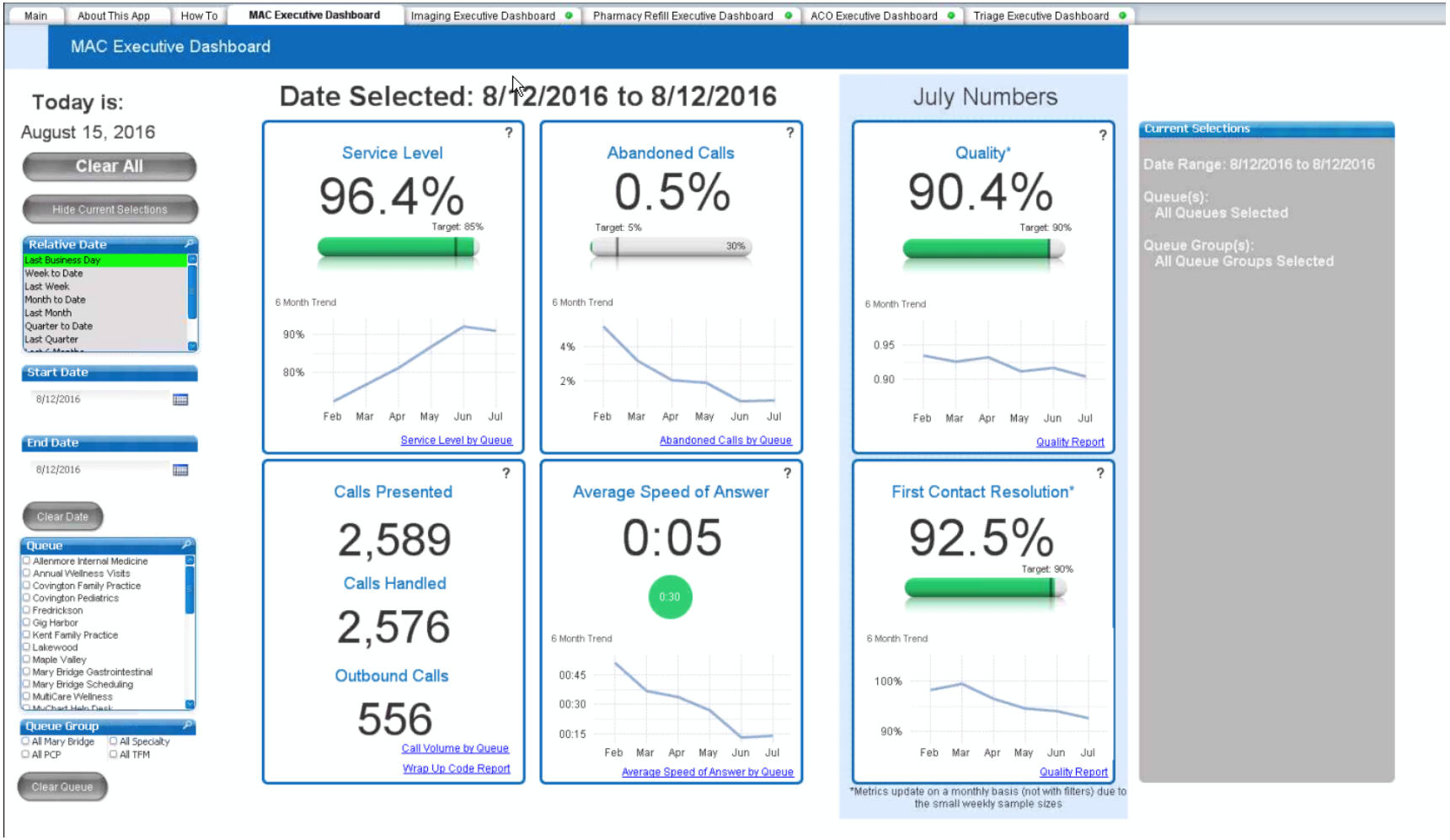
Summary of 2017 Observations (continued)

Observation #	FY17 Observation	Status of FY17 Observations
Observation #3: IVR Solution Reporting and Monitoring	CFX should work with Swampfox to implement enhancements to its IVR reporting so the use of the IVR can be more effectively monitored and improved over time.	CFX has not been able to take advantage of this opportunity to date. This recommendation is repeated in 2019. See 2019 observation #3.
Observation #4: Quality Assurance Processes	1. Contact center supervisory staff should conduct one to two weekly QA monitors per agent. The use of supervisory staff in the QA process tends to help ensure cohesion between QA the rest of the contact center 2. Make QA data/performance available in real-time 3. Increase number of screen captures for quality purposes 4. Provide agents with time at beginning of shift to review prior day performance, CFX marketing material, training, or other materials to better prepare them for the shift.	These recommendations have been adopted.

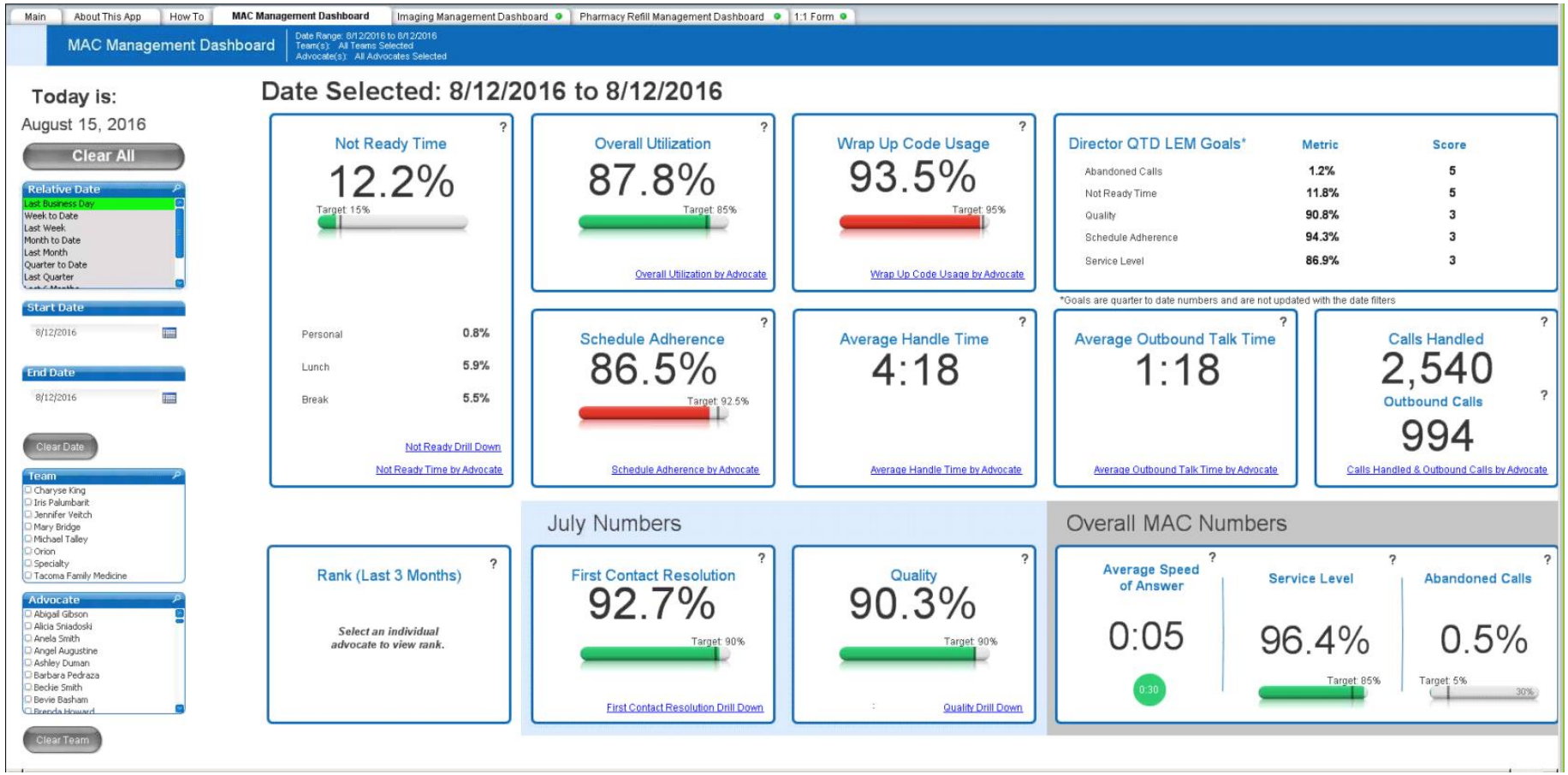
APPENDIX B

Sample Dashboards

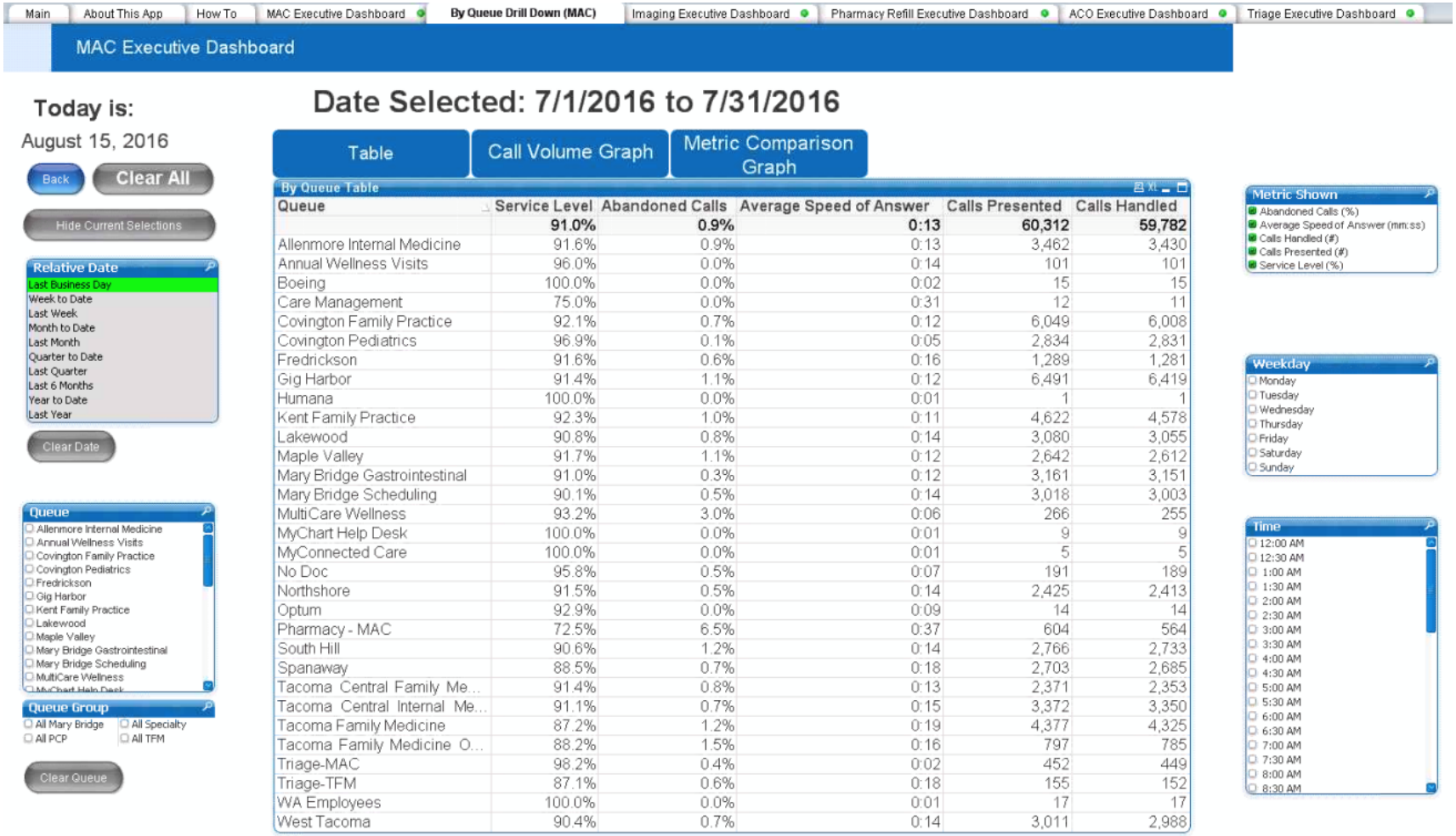
APPENDIX B – DASHBOARD EXAMPLE



APPENDIX B – DASHBOARD EXAMPLE



APPENDIX B – DASHBOARD EXAMPLE



Queue	Service Level	Abandoned Calls	Average Speed of Answer	Calls Presented	Calls Handled
	91.0%	**0.9%**	**0:13**	**60,312**	**59,782**
Allenmore Internal Medicine	91.6%	0.9%	0:13	3,462	3,430
Annual Wellness Visits	96.0%	0.0%	0:14	101	101
Boeing	100.0%	0.0%	0:02	15	15
Care Management	75.0%	0.0%	0:31	12	11
Covington Family Practice	92.1%	0.7%	0:12	6,049	6,008
Covington Pediatrics	96.9%	0.1%	0:05	2,834	2,831
Fredrickson	91.6%	0.6%	0:16	1,289	1,281
Gig Harbor	91.4%	1.1%	0:12	6,491	6,419
Humana	100.0%	0.0%	0:01	1	1
Kent Family Practice	92.3%	1.0%	0:11	4,622	4,578
Lakewood	90.8%	0.8%	0:14	3,080	3,055
Maple Valley	91.7%	1.1%	0:12	2,642	2,612
Mary Bridge Gastrointestinal	91.0%	0.3%	0:12	3,161	3,151
Mary Bridge Scheduling	90.1%	0.5%	0:14	3,018	3,003
MultiCare Wellness	93.2%	3.0%	0:06	266	255
MyChart Help Desk	100.0%	0.0%	0:01	9	9
MyConnected Care	100.0%	0.0%	0:01	5	5
No Doc	95.8%	0.5%	0:07	191	189
Northshore	91.5%	0.5%	0:14	2,425	2,413
Optum	92.9%	0.0%	0:09	14	14
Pharmacy - MAC	72.5%	6.5%	0:37	604	564
South Hill	90.6%	1.2%	0:14	2,766	2,733
Spanaway	88.5%	0.7%	0:18	2,703	2,685
Tacoma Central Family Me...	91.4%	0.8%	0:13	2,371	2,353
Tacoma Central Internal Me...	91.1%	0.7%	0:15	3,372	3,350
Tacoma Family Medicine	87.2%	1.2%	0:19	4,377	4,325
Tacoma Family Medicine O...	88.2%	1.5%	0:16	797	785
Triage-MAC	98.2%	0.4%	0:02	452	449
Triage-TFM	87.1%	0.6%	0:18	155	152
WA Employees	100.0%	0.0%	0:01	17	17
West Tacoma	90.4%	0.7%	0:14	3,011	2,988

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