

# 4 Steps to Transform Radiology Center Scheduling Operations with Data Driven Decision Making (DDDM)

How CCD Health cut call abandonment rate from 27% to 2%



Our customer was a national provider of diagnostic imaging and interventional radiology services with a network of 9 outpatient imaging centers in Florida.

# Step 1 / Understanding and quantifying the challenge

March 2023: **an unforeseen 10-15% surge in call volume** due to severe understaffing. As a consequence, patients unable to connect initially made multiple attempts throughout the day, leading to a cascading effect and a spike in abandoned call rates, peaking at 27%.

- Prolonged hold times impact center's reputation and patient experience.
- Patient complaints divert referrals to other centers.
- Missed revenue due to abandoned calls: approximately 11% of lost exams.



# This center was losing around **\$12,000 USD** revenue daily.





In this step, we select the appropriate data analysis tools to effectively manage and optimize our contact center workforce.

# Step 2 / Using data analysis tools to create an optimization plan

### • Staffing Analysis:

Utilizing historical data, we perform a comprehensive analysis to assess the current Full Time Equivalent (FTE) staffing levels at specific time intervals while taking into account Service Level Agreements (SLAs) and Average Speed of Answer (ASA).

### • Staffing Plan:

This 4-6 week plan encompasses the required headcount, anticipated attrition, class scheduling, and the expected weekly onboarding of new workforce.



In this case, to secure an average call abandonment rate of 3%:

FTE of 38 TO FTE of 50

### Est. Investment \$51,000 USD / mo.

In situations of understaffing, it's crucial to address the risk of workforce burnout and attrition.





Contact center QA plays a crucial role in improving Average Handling Time (AHT) and increasing agent's productivity, often overlooked but highly effective aspect to achieve efficient scheduling.

# Step 3 / Leveraging QA to enhance patient experience: call flow and scripts

Structured call flows and scripts ensure that agents follow a consistent and standardized approach when handling customer inquiries. This consistency minimizes variations in call handling, reducing AHT.

- Efficient patient information retrieval
- Agent training and onboarding
- Drives workforce scheduling productivity

#### Initial Scr

"Thank you Mr./Mrs. (lo please conf address? is number?"

"Great, an phone num



Optimizatio

Initial

Optimizatio

Initial

Optimizati

| ipt  | Optimized Script   | Benefit in time |
|--|--|-----------------|
| for that information<br>ast name), May you<br>firm your home<br>there an apartment | "Thank you for confirming. Is<br>your cell phone number<br>555/***?" | 20 seconds      |
|  | "Is your email address<br>xxx@gmail.com?"                            |                 |
| d what is the best<br>ber to reach you?"   | "Thank you"  |                 |

| Average Handling Time |           |           |           |  |  |
|-----------------------|-----------|-----------|-----------|--|--|
|                       | AHT (min) | Call/Hour | Variation |  |  |
|                       | 6.5       | 9         | 23%       |  |  |
| on                    | 5.3       | 11        |           |  |  |

| Calls Handled (per agent per hour and per day) |           |          |           |  |  |
|--|-----------|----------|-----------|--|--|
|  | Call/Hour | Call/Day | Variation |  |  |
|  | 9.23      | 73       | 220/      |  |  |
| on   | 11.32     | 90       | 2370      |  |  |

| Calls Handled (per agent per hour and per day) |       |          |           |  |  |
|--|-------|----------|-----------|--|--|
|  | Agent | Call/Day | Variation |  |  |
|  | 45    | 3,323    | 229/      |  |  |
| ion  | 45    | 4,075    | 2370      |  |  |







# **No-show Predictive Model**

# Data collection

Ensure we gather at least 6 months of predictive variables, including day/time, patient demographics, type of insurance, imaging modality, and other relevant external factors.

## Model training

Once data is prepared, our proprietary ML model, shaped by a decade of specialized radiology scheduling expertise, processes it to generate pattern-based predictions.



# Harnessing data for better outcomes

# Data cleaning

Clean and preprocess the data to remove any inconsistencies or outliers. This step is crucial to ensure the accuracy of the predictions.

## Enable optimization tactics

 The data outcomes allows to target specific patient segments.
Design outbound programs to bring in more patients.
Higher patient CVR%