

CASE STUDY

# **State Collection**

# Increases Liquidation for Froedtert Hospital With Al-Driven Segmentation and Patient Contact Strategy

State's data-driven approach to recoveries improves patient engagement and increases payments.





#### Incorporating AI into the revenue recovery process can drive significant improvements in efficiency and payment outcomes.

As patients have become increasingly responsible for their healthcare costs and as macro-issues, like COVID-19, have further impacted patients' ability to pay their bills, Al-based technologies provide a path for better understanding patient needs and proactively working with them on payment options.

State Collection is strategically infusing predictive modeling and machine learning into their recovery operations and doing so in a way that not only optimizes recoveries but also strengthens patient relationships. Working with Sift Healthcare, State is leveraging historical payments data to predict patient behavior and determine the most effective course of action to help patients resolve their accounts. This approach provides a strategic framework for managing work efforts, improving patient engagement and increasing payments.

**State worked with Sift Healthcare to measure the impact of Sift's Al-driven approach to recoveries.** In a live, side-by-side test for Froedtert Hospital, State matched Sift against their current propensity segmentation and patient account approach. Sift's segmentation, contact cadence recommendations and payment plan recommendations drove a significant increase in liquidation rate and dollars collected.



#### ABOUT STATE COLLECTION

State is a leader in healthcare receivables, focused on a patient-centric approach, technology and compliance. Rooted in a tradition of ethics, integrity and innovation since 1949, State assists healthcare organizations with services spanning the complete revenue cycle including Pre-Service Financial Clearance, Early Out Self-Pay Resolution, Insurance Follow-Up and Bad Debt Collection.

# **OBJECTIVES**

- Integrate AI to optimize workflows.
   Use Sift's predictive modeling and machine learning to improve patient segmentation and direct work efforts.
- Optimize patient contact strategy.
   Implement a data-driven contact cadence that optimizes outreach timing and frequency to improve patient engagement and drive liquidation.
- Proactively assist patients.
   Maximize collections by identifying the patients that most benefit from alternative payment options.

# **IMPACT**

#### **↑ 2% COLLECTION LIFT**

Applied across all accounts, Sift's approach represents a 2% increase in gross collections.\*

#### **↑** 3.2% PAYMENT LIFT

Across segments where Sift recommended a payment plan.\*\*

#### **PATIENT CONTACT RATE**

Sift's contact cadence drove a 20% reduction in outbound phone calls and an 8.5 percentage point increase in patient contact rate.



WHEN PATIENTS ARE CONTACTED IN THE RIGHT WAY, AT THE RIGHT TIME, THEY ARE MORE LIKELY TO RESOLVE THEIR ACCOUNTS.

# THE CHALLENGE

Proactively communicating with patients and collecting payments in a patient-friendly manner have always been a cornerstone of State's approach to self-pay account follow-up. But State also knew that there was more data they could leverage to further segment patients and drive workflows. State wanted to utilize the full scope of their data to deeply understand patients and be better equipped to determine the optimal contact strategy and best-fit payment plan for each patient.

"We know that different patients need different approaches to engagement as well as different payment options. When patients are contacted in the right way, at the right time, they are more likely to resolve their accounts," said Tracy Dudek, COO for State Collection. State's goal was to develop a data-driven and patient-centered approach to segmentation that, in turn, would improve how State approached contact strategy and payment plan offerings.

\*If the lift seen in Sift's Test Group were applied across all accounts, Froedtert Hospital would have realized an increase in gross collections of 25

<sup>\*\*</sup>The 3.2% increase in payments is specific to patient accounts that were targets for payment plans based on Sift's advanced segmentation.

## SIFT'S SOLUTION

State engaged with Sift to provide Al-based patient account segmentation as well as custom recommendations for contact cadence and payment plan provisioning. Sift's segmentation and recommendations were integrated into State's FACS system to optimize State's existing workflows.

#### **Beyond Simple Scoring**

Sift's robust approach goes beyond simple propensity to pay scores applying true machine learning that encompasses more data points than competitive solutions. Sift's Al automatically transforms score into action with predictive models that consider not only payment likelihood, but also expected value and optimal engagement strategy.

#### **Detailed Segmentation To Drive Account Resolution**

Some patients will always pay their bill and some patients will never pay. The patients that fall in-between the "always" and "never" groups offer an opportunity for meaningful engagement. These patients want to pay their bills, but due to balance size or timing, may not be able. Sift's predictive models finitely segment this opportunity group and provide actionable recommendations around engagement approach.

#### **Dynamic and Transparent**

Sift's approach is dynamic, with daily adjustments around patient segments, work strategy and payment plan recommendations. Sift's Rev/Track reporting tool provides instant access to normalized data, up-to-date metrics and detailed test results.

# **METHODOLOGY**

To initiate the State Collection Test, Sift analyzed two years of historical patient encounter data, normalizing this data and using it to build custom predictive models around propensity to pay, payment amount and contact cadence. These models were used to define Sift's patient segments.

#### **Data for Modeling**

Powered by Sift's cloud-based data platform, Sift assembled historical payments data in a relational database and then randomly divided the data into training, validation and test sets. The training data was used to build Sift's predictive models and the validation and test sets were used to test the accuracy of the models on the historic data.

#### **Supervised Learning**

Sift employed proprietary supervised learning models, which are trained to find important attributes leading to the most accurate prediction that a patient will pay in full during the early-out period. Sift utilizes a variety of models and algorithms that provide accuracy, robustness and resistance to data problems in scoring.

#### In Production

Patient encounter data was sent to Sift daily through secure FTP (SFTP) and Sift's daily workflow recommendations for the Test Group were dynamically fed into State's FACS workflows. This setup allowed State and Sift to monitor the impact of Sift's predictive modeling, patient account segments and machine learning recommendations.

Sift collaborated closely with State in the setup of this test, ensuring that patient segments made sense, workflow recommendations integrated seamlessly into their system and reporting captured metrics and insights that could be shared with State's health system client.



# **Side-By-Side Test Results**

# 1. LIQUIDATION RATE AND DOLLARS COLLECTED

Sift's Al-driven approach to account segmentation, contact strategy and payment plan provisioning increased State's total net liquidation for Froedtert Hospital.

Across all segments, Sift's Test Group saw 1.08 point increase in net liquidation rate and a 1.97% lift in collections compared to the Control Group.

# 2. PROACTIVE PAYMENT PLANS

For patient account segments where Sift recommended a payment plan, the Sift Test Group saw a **1.80 point increase** in net liquidation rate and a significant **3.22% lift in collections** compared to the Control Group.

#### **Higher Dollar Balances**

For patient account segments where Sift recommended a payment plan **and** account balances were greater than \$100, the Sift Test Group saw a 1.92 point increase in net liquidation rate and a 3.57% lift in collections vs the Control Group.

### Sift's improved liquidation rate

is driven by Sift's superior patient account segmentation and data-driven recommendations to proactively offer payment plans to the segments of the population that will most benefit from flexible payment options.

# 3. STRATEGIC CONTACT CADENCE

Sift's data-driven scoring, segmentation and contact cadence recommendations enabled State to be more strategic in their patient outreach efforts for Froedtert Hospital, prioritizing their calling pattern to focus on the patients who are most likely to resolve their accounts and be responsive to contact efforts.

Sift's Test Group reduced outbound phone calls by 20% while simultaneously increasing the patient contact rate by 8.5 percentage points (vs Control).

Sift's approach allowed State and Froedtert Hospital to benefit from fewer, more-focused calls while improving collection performance.

Sift's workflow recommendations drove better timed calls and higher value calls, enabling State to better allocate employee time and talent and integrate new calling efficiencies.

# **OVERALL IMPACT**

- Improved performance. Increased net liquidation rate and increased collections.
- **Strategic patient contact.** Contacting patients at the optimal time and frequency, and proactively offering the best-fit payment option.
- Robust intelligence, with insights that helped functional leaders make decisions around strategy, resources and workflows.
- **Granular reporting** around segment behavior, trends and overall performance. Sift's detailed reporting was provided in formats that enabled State to share new insights internally as well as with Froedtert Hospital.



For more Information: sales@sifthealthcare.com www.sifthealthcare.com Sift's payments analytics and machine learning platform transforms healthcare payments — utilizing data, analytics and AI to improve payment outcomes.

- Denials Prevention and Prioritization
- · Patient Payments Management
- Patient Engagement Strategy
- Operational Reporting
- C-Suite Intelligence Tools