# 7 Ways AI Can Strengthen the Patient Financial Experience and Payment

*The future of the patient financial experience—and ultimately, collections— lies in a hospital's ability to leverage artificial intelligence (AI).*

Within five years, AI will power 95 percent of customer interactions across industries. We're already seeing early-adopting organizations deploy AI in live telephone conversations with such a degree of sophistication that consumers are unable to "spot the bot." AI-powered interactions increase efficiency while meeting consumer demands with a high degree of precision and prowess.

## avadynehealth

**The Patient Financial Experience Company** ®

800-973-9890  |  avadynehealth.com

In healthcare revenue cycle, the benefits of AI are just beginning to be realized:

- One health system reduced its billing cycle from 30 days to 3 days by automating functions like eligibility checks, prior authorizations, and claims processing. It's an approach that enables staff to spend more time on higher-value interactions with patients, eliminating long billing cycles while enhancing the patient financial experience.
- Complex denials have dropped 21 percent, on average, over the past two years among organizations using AI-powered coding solutions. Coder productivity, meanwhile, increased 55 percent.
- At UnityPoint Health, use of machine learning and automation in revenue cycle since November 2017 has significantly reduced time to credit balance resolution. It has also eliminated wasted touches per denied claim, getting cash in the door more quickly.
- At Yale New Haven Health, adoption of AI-powered automation in revenue cycle for repetitive tasks decreased FTE time by 14 percent.

But typically, health systems focus their use of AI on process automation that boosts staff efficiency. Perhaps the biggest untapped opportunity to use AI in healthcare revenue cycle is to pair AI technologies with patient financial engagement. It's an approach that not only enhances satisfaction, but also increases collections.

# Experience Changes Everything

Healthcare leaders' readiness to use AI in healthcare revenue cycle is rapidly increasing. While just 22 percent of healthcare organizations use software platforms with AI capabilities, 63 percent of healthcare leaders surveyed plan to increase AI analytics investments over the next three years, a recent report shows. Their primary areas of focus: leveraging AI analysis around clinical data (81 percent), financial data (72 percent), and patient data (59 percent).

Meanwhile, automating business processes—including revenue cycle management functions—is the top investment priority for 51 percent of healthcare providers, another survey shows.

But what if applications of AI—data-driven intelligence that enables decision making,

**avadyne**health
The Patient Financial Experience Company®

800-973-9890  |  avadynehealth.com

predicts outcomes, and enhances efficiency—were to go beyond performing repetitive tasks competently toward performing intellectual tasks in the same way that humans can? In this scenario, AI could be used to curate a patient-specific outbound experience by:

- Delivering patient-specific communications in the patient's desired channel and
- Timing communications based on individual responsiveness
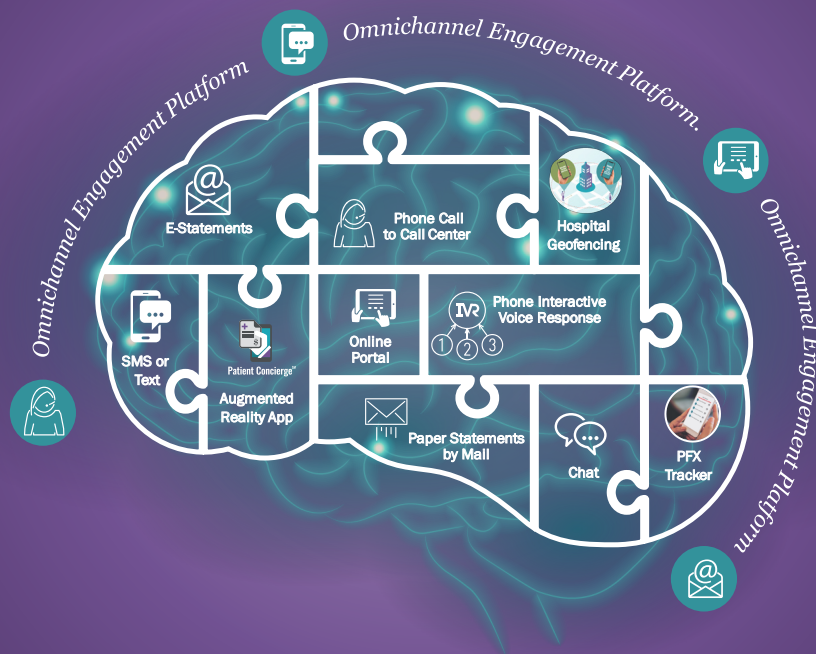


*At Avadyne Health, our experience shows that when AI is used to engage patients in the way in which they wish to be engaged, hospitals and health systems can achieve gains in performance.*

avadynehealth

The Patient Financial Experience Company ®

800-973-9890  |  avadynehealth.com

The use of AI in healthcare revenue cycle goes beyond elevating financial performance, such as meeting or exceeding the strategic industry benchmarks set by HFMA, known as the HFMA MAP Keys. An HFMA task force found that when healthcare organizations invest in innovative tools to strengthen the digital experience they provide for consumers— including around patient financial engagement—they demonstrate higher levels of maturity in providing a consumer-centric financial experience.

## What It Takes to Achieve Level 5 Status on HFMA's Maturity Scale for Digital Experience

| **Table 16.** Maturity Scale for Digital Experience | |
|---|---|
| **SCORE** | **SCORING CRITERIA** |
| **1** | • Consumers may access, via a desktop application, provider information that includes location, hours of operation and quality ratings.<br>• Consumers may call to speak with a representative for additional questions.<br>• Health plan websites may also provide subscriber-specific information to consumers. |
| **2** | **All applicable items in Level 1 plus:**<br>• Using a desktop application, consumers may request appointments.<br>• Consumers may view bills online.<br>• Consumers may make profile information updates. |
| **3** | **All applicable items in Level 2 plus:**<br>• Using a desktop application, consumers may access billing information and pay online, request medical history and view lab results.<br>• FAQs for the most common inquiries are provided.<br>• Automated emails are deployed to acknowledge the consumer's inquiry. |
| **4** | **All applicable items in Level 3 plus:**<br>• Using a desktop application, consumers may request appointments and reminders via call or text.<br>• Consumers may call in to speak with a qualified representative for additional questions or chat with a bot to answer general questions.<br>• Response times are monitored, and additional resources used, during periods of high call volume. |
| **5** | **All applicable items in Level 4 plus:**<br>• Based on their customized preferences, consumers may access the provider's digital experience via desktop or mobile.<br>• Consumers may submit insurance information in advance of an appointment and request appointment reminders via text or direct to calendar.<br>• Providers are able to electronically push address information links to map utilities, calculation of travel time, etc., directly to the consumer's mobile device.<br>• When an insurance card is uploaded, the patient's copayment, deductible and related information are displayed on the screen for patients.<br>• Consumers may access live billing information, pay bills online, and view medical history and lab results.<br>• Consumers may make profile information updates.<br>• Consumers may live chat with a live service representative or call in to speak with a representative — if there is a wait time, the consumer will be offered an auto-call back without losing their place in the queue.<br>• Emphasis is placed on a system of immediate, personalized follow-up to all consumer inquiries.<br>• Key principles of HFMA's consumerism best practices, including patient financial communications and medical account resolution best practices and price transparency guidelines, are incorporated into the patient experience.<br>• Other innovative ways or initiatives to improve the patient experience are sought. |

Source: Maturity Model Measurement Tools for Consumerism in Healthcare, HFMA, March 2020, https://www.hfma.org/content/dam/hfma/Documents/industry-initiatives/consumerism-maturity-model-report.pdf.

HFMA research also shows leading healthcare organizations that have applied AI in revenue cycle operations are achieving higher levels of performance around HFMA MAP Keys. For example, lessons learned from winners of the HFMA MAP Award for High Performance in Revenue Cycle—the nation's most prestigious award for revenue cycle excellence—also point to the power of AI in revenue cycle to decrease billed aged accounts receivable and strengthen denials management.

## Developing an AI–Based Approach to the Patient Financial Experience

How can healthcare organizations leverage AI to provide a patient financial experience that not only strengthens satisfaction and loyalty, but also increases self-pay collections? At Avadyne Health, our work with hospitals and health systems across the country points to the value of incorporating AI in our total "PXaaS Patient Experience as a Service℠" approach which utilizes an omnichannel engagement platform that applies advanced analytics to:

- Engage patients how they want to be engaged
- Achieve one-call resolution for consumer questions and concerns
- Lessen confusion with the payment process
- Deliver helpful financial solutions the first time, every time



PXaaS℠
Patient Experience As a Service

An AI-fueled approach to our PXaaS Patient Experience as a Service℠ empowers healthcare organizations to not only leverage data and technology to elevate the patient financial experience, but also:

- Collect payment sooner
- Lower the cost to collect
- Simplify patient financial communications, increasing efficiency
- Develop a smarter approach to patient account management
- Increase collections as a percentage of net revenue and decrease bad debt

Here are seven examples of the AI-based approach to our PXaaS Patient Experience as a Service℠.

*Understanding your patient financial engagement score.* As healthcare revenue cycle departments continue to be challenged to provide a world-class customer experience, knowing their patient financial experience score (ePFXscore) is critical to understanding the factors that impact patient satisfaction, pinpointing areas of strength and weakness,

**avadyne**health
The Patient Financial Experience Company ®

**800-973-9890** | avadynehealth.com

and coaching staff to elevate performance. At Avadyne Health, we deploy AI as part of our PXaaS Patient Experience as a Service℠ to analyze data from patients and guarantors across 300 hospitals as well as patient satisfaction surveys and customer call center conversations to uncover:

- The 9 drivers that make the biggest impact on patient satisfaction, from timeliness and accuracy of processing accounts to customer call center interactions
- The actions most likely to engage consumers during a patient financial encounter, increasing satisfaction and collection rates

This approach to scoring the patient financial experience provides comprehensive, statistically-valid feedback that drives results, unlike HCAHPS scores and post-call surveys, which leave revenue cycle leaders making decisions based on gut instinct or net revenue—neither of which tell the whole story.

At Avadyne, regular patient financial experience scoring reports enable revenue cycle teams to compare their performance on a month-to-month basis and against their peers. Leaders can then determine, at a glance, where to concentrate efforts for improved performance.
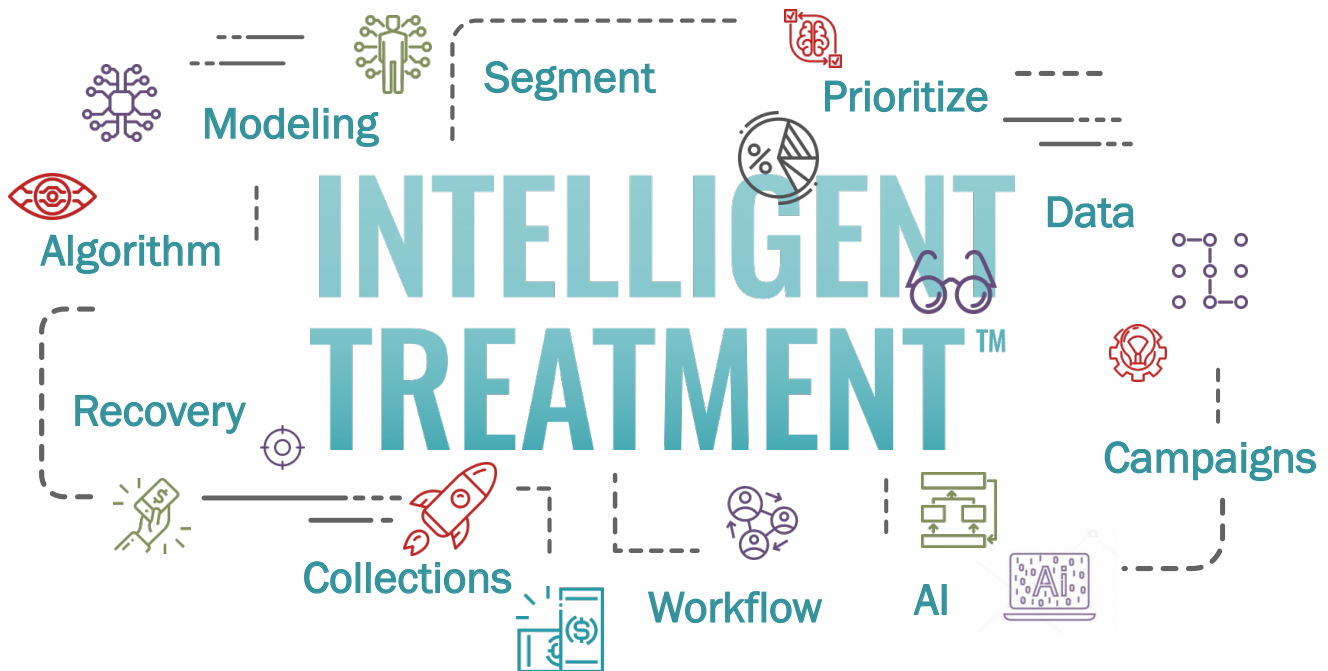
**avadyne**health
The Patient Financial Experience Company®

**July 2019**

**ePFXscore**

| Decile Rank | Top 20% | | Current Month | | | Comparisons | | |
|---|---|---|---|---|---|---|---|---|
| Component | 13 month Score Trend | Health System | Early Out Avg | Grade | Satisfaction | MoM | YoY | Trend | vs All Customers |
| ePDXscore | | 85.5% | 83.2% | B | ☺ | ↓ -1% | → 0% | FLAT | 2% Above Avg |
| Aged Assignments | | 92.4% | 85.7% | A- | ☺ | → 0% | ↓ -1% | FLAT | 7% Above Avg |
| BAI Accounts w/o Insurance | | 90.8% | 86.6% | A- | ☺ | ↑ 1% | ↑ 1% | UP | 4% Above Avg |
| Bad Debt | | 79.5% | 73.7% | B+ | ☺ | ↓ -1% | ↑ 1% | FLAT | 6% Above Avg |
| Returned Accounts | | 99.4% | 90.9% | A+ | ☺ | → 0% | → 0% | FLAT | 8% Above Avg |
| Amount Owed By Patient | | 96.6% | 93.4% | B+ | ☺ | → 0% | → 0% | FLAT | 3% Above Avg |
| Timing of First Payment | | 64.2% | 66.5% | C- | ☺ | ↓ -1% | ↓ -2% | DOWN | 2% Below Avg |
| Hold Times | | 99.1% | 98.1% | A+ | ☺ | ↑ 3% | ↑ 18% | UP | 1% Above Avg |
| Inbound Calls | | 86.2% | 85.6% | B | ☺ | ↓ -2% | ↓ -2% | UP | 12% Below Avg |
| Negative Speech Analytics | | 86.6% | 88.4% | B- | ☺ | ↓ -1% | ↓ -1% | DOWN | 13% Above Avg |
| Will Not Pay | | 84.2% | 85.0% | B- | ☺ | ↓ -1% | → 0% | DOWN | 11% Above Avg |

**avadyne**health
The Patient Financial Experience Company®

800-973-9890  |  avadynehealth.com

*Speech analytics.* Speech analytics deployed during customer service calls are a form of AI that uses automated audio transcription to turn conversations with patients into actionable analytics. Speech analytics utilizes natural language processing and voice algorithms to accurately extract call sentiment (voice pace, volume, pitch, tonality, and other factors) to track developing sentiment, keywords and phrases that reveal trends across every recorded call. For example, speech analytics can reveal common frustrations faced by patients in reviewing medical bills. With this information in hand, hospital revenue cycle departments can create a better patient financial experience—and boost collections.

Avadyne Health uses speech analytics to monitor every call for behavioral and engagement metrics. This allows us to recommend changes in approach, pinpoint root causes of escalation, and deliver a positive experience that generates financial return for hospitals.
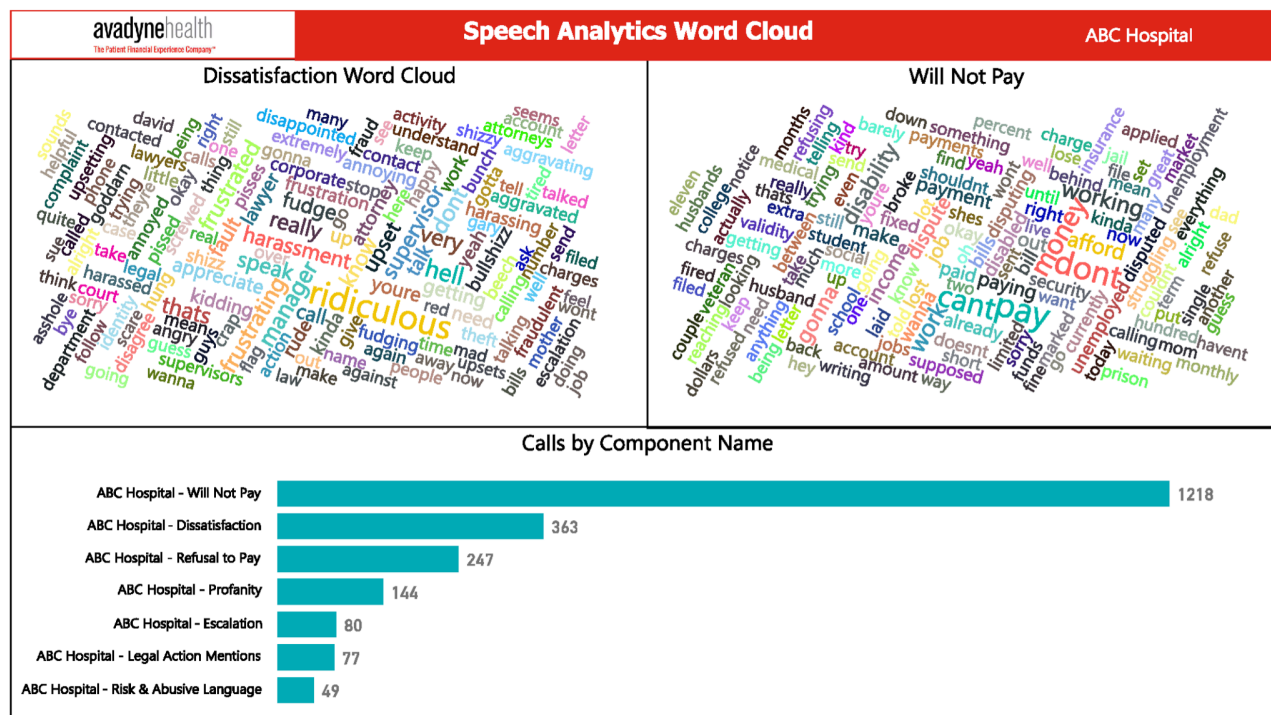


*Intelligent treatment of accounts.* This AI-enabled approach uses automated propensity-to-pay logic to determine the right approach to communicating with guarantors based on an individual's payment history. Each account is segmented based on the probability that the patient will pay the out-of-pocket balance due. When combined with automated workflow routing to direct the right accounts to the right staff at the right time, hospitals achieve increased efficiency and optimal financial returns.

## *Leveraging Analytics for Actionable Business Intelligence*



**INTELLIGENT TREATMENT™**

Modeling · Segment · Prioritize · Data · Algorithm · Recovery · Campaigns · Collections · Workflow · AI

*Patient Concierge.* Top performers using AI to strengthen the patient financial experience have found value in a first-of-its-kind, augmented reality billing app that uses an avatar to walk patients through their hospital bill, answer any questions they might have, and direct them to the right action at the right time, from bill payment to live customer support. Piloted at Banner Health beginning in 2019, the Patient Concierge app is increasing patient engagement, driving self-service patient payment and improving self-pay collections.



Patient Concierge℠

avadynehealth
The Patient Financial Experience Company®

800-973-9890 | avadynehealth.com
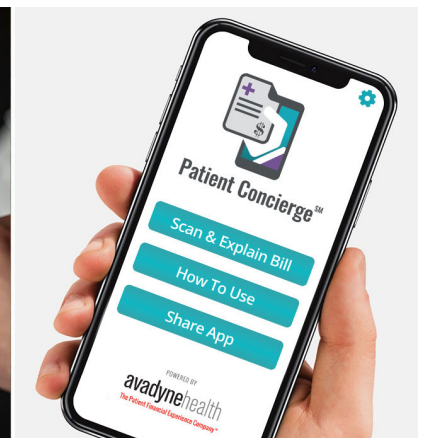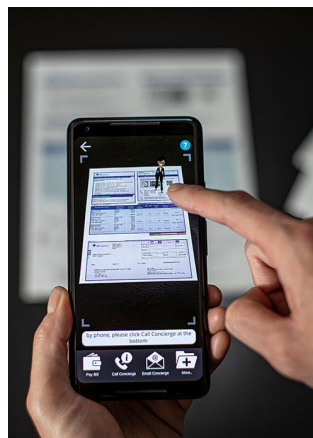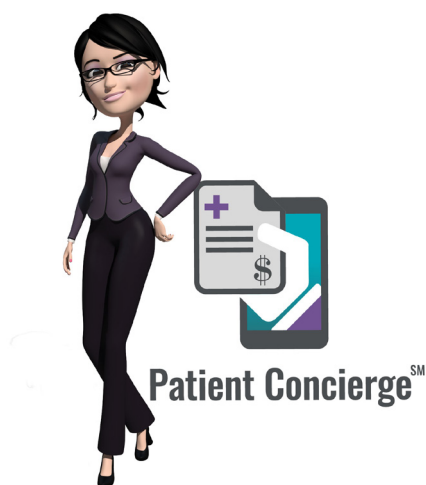
*Automated reconciliation.* This involves the use of advanced analytics and automation to reconcile payer remittance advice with payment received. Automated reconciliation is 10 times faster than manual reconciliation and far more precise. When discrepancies between remittance advice and payment exist, they are resolved quickly. The result: a state-of-the-art process that enables hospitals to pursue out-of-pocket balances more quickly, bringing cash in the door sooner.

*Presumptive charity.* The use of a presumptive charity solution to identify candidates for financial assistance helps justify community benefit allotments while avoiding audit issues. This AI-enabled tool not only offers financial assistance discounts to patients in need on a presumptive basis, but also helps enforce the organization's financial policies and supports the organization's goals. Patient data are combined with data from external sources for a highly consistent, highly accurate approach that reduces bad-debt write-offs and engenders good will among consumers.

*Payment portals.* The AI-based payment portal of the future will be able to send patients notices or payment reminders automatically based on knowledge of the patient's preferences, payment history and analysis of payer data. When combined with current self-service features that enable patients to combine bills, set up payment plans based on the organization's financial policies, and quickly make payments, this tool strengthens engagement by delivering communications in a desired format and puts the power to resolve accounts in the hands of the consumer.

By adopting an AI-empowered approach to the patient financial experience, hospitals and health systems are better positioned to curate patient-specific outbound and inbound experiences that strengthens their organization's financial health.

Avadyne Health, rated No. 1 in patient communications and financial satisfaction solutions by Black Book Research, provides self-pay account resolution and bad debt recovery services to 340+ hospitals including the largest, multi-hospital, health systems in the U.S. With patients' expectations for healthcare services changing, Avadyne Health excels in addressing the increased need for better and less-complex patient financial communication, experiences, solutions and technology.

**For more information, visit avadynehealth.com.**

**avadyne**health

The Patient Financial Experience Company®

800-973-9890 | avadynehealth.com