

CASE STUDY

Patient Intake & Appointment Management

How we reduced administrative workload and improved patient engagement with an AI Powered system, streamlining scheduling, intake, and follow-ups.

01 THE CHALLENGE

Manual Work Burden on Staff

Manual handling, missed patient appointments, and rising call volumes created inefficiencies, impacted revenue growth, and lowered overall patient experience.



High Call Volume

Appointment booking calls overwhelmed front desk staff, leading to long wait times and missed patient inquiries.

Missed Reminders

Lack of reminders caused appointment no-shows and gaps in patient communication.

Manual Intake Process

Patient records and forms were handled manually, increasing workload and delays.

02 THE SOLUTION

Seamless Workflow

01 Appointment Agent

Voice + Chat AI

Handles appointment bookings, rescheduling, and patient inquiries 24/7, eliminating wait times and missed calls.

02 Patient Intake Agent

Data Automation

Verifies patient information before appointments, reducing manual effort and improving accuracy.

03 Reminder & Care Agent

Engagement Automation

Sends appointment reminders, care instructions, and important updates via SMS, WhatsApp, and email.

04 Document Intelligence Agent

Medical Intelligence

Extracts and organizes key data from reports, prescriptions, and medical documents.

03 TRANSFORMATION

Before vs After

APPT	PATIENT	STATUS	PROVIDER
AP-4401	J. Harper, Boston MA	NO-SHOW	Dr. Brennan
AP-4402	M. Donovan, Seattle WA	ON HOLD	Line busy
AP-4403	S. Reyes, Chicago IL	RECORD MISSING	Dr. Kowalski
AP-4404	A. Patel, Denver CO	DOUBLE BOOKED	slot conflict

31 missed calls • 12 no-shows this week alone
Front desk overwhelmed • Patient records on paper files

AVG HOLD TIME	NO-SHOW RATE	RECORD RETRIEVAL	REVENUE LOSS
~7 min	38%	~15 min	~\$7,200

APPT	PATIENT	STATUS	TIME
AP-4401	J. Harper	Confirmed + reminder	10:30 AM
AP-4402	M. Donovan	Auto-scheduled	11:15 AM
AP-4403	S. Reyes	Record pre-loaded	1:00 PM
AP-4404	A. Patel	Slot optimized	2:30 PM

All 362 appointments managed • 0 conflicts • Records digitized
SMS & email reminders sent 24hr prior • Patient portal synced live

Manual Operations

- Overloaded Front Desk**
Staff handling high volumes of calls and scheduling manually.
- Missed Appointments**
No reminders leading to frequent no-shows.
- Paper Based Records**
Fragmented or manual patient data systems.
- Delayed Communication**
Slow responses to patient queries and updates.

AI-Powered System

- 24/7 Scheduling**
Appointments handled instantly with zero wait time.
- Proactive Reminders**
Automated alerts reducing missed appointments.
- Digitized Records**
Structured patient data ready before visits.
- No Communication Gap**
Consistent engagement across multiple channels.

04 SCALABILITY

Built for Patient Volume

24/7 Availability

Handles bookings and patient queries anytime.

Patient Management

Processes large volumes of patient interactions & appointments.

Consistent Accuracy

Maintains high accuracy in patient data handling & reporting.

Multi-Location Scaling

Deployable across clinics, departments, and locations.



Whether managing a single clinic or multiple locations, patient experience remains consistent and efficient.

05 RESULTS

Measurable Impact, Immediate Gains



38%

NO-SHOW DROP

Reduced missed appointments through automated reminders.

70%

WORKLOAD REDUCTION

Lower front desk workload and administrative burden.

Faster

ONBOARDING

Improved patient intake and overall experience.

NEXT STEPS

Your Practice could be next

See how TechYard's AI systems can streamline patient workflows and improve operational efficiency.