Healthcare AI Adoption Guide 2026

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Introduction

Healthcare systems entered 2026 facing a familiar but unavoidable contradiction: **patient demand continues to rise,** yet **operational capacity continues to shrink.** The U.S. healthcare market alone is projected to grow from **$4.87T** in 2024 to **$7.64T** by 2033, expanding at a **5.8%** CAGR, but system capacity is not keeping pace.

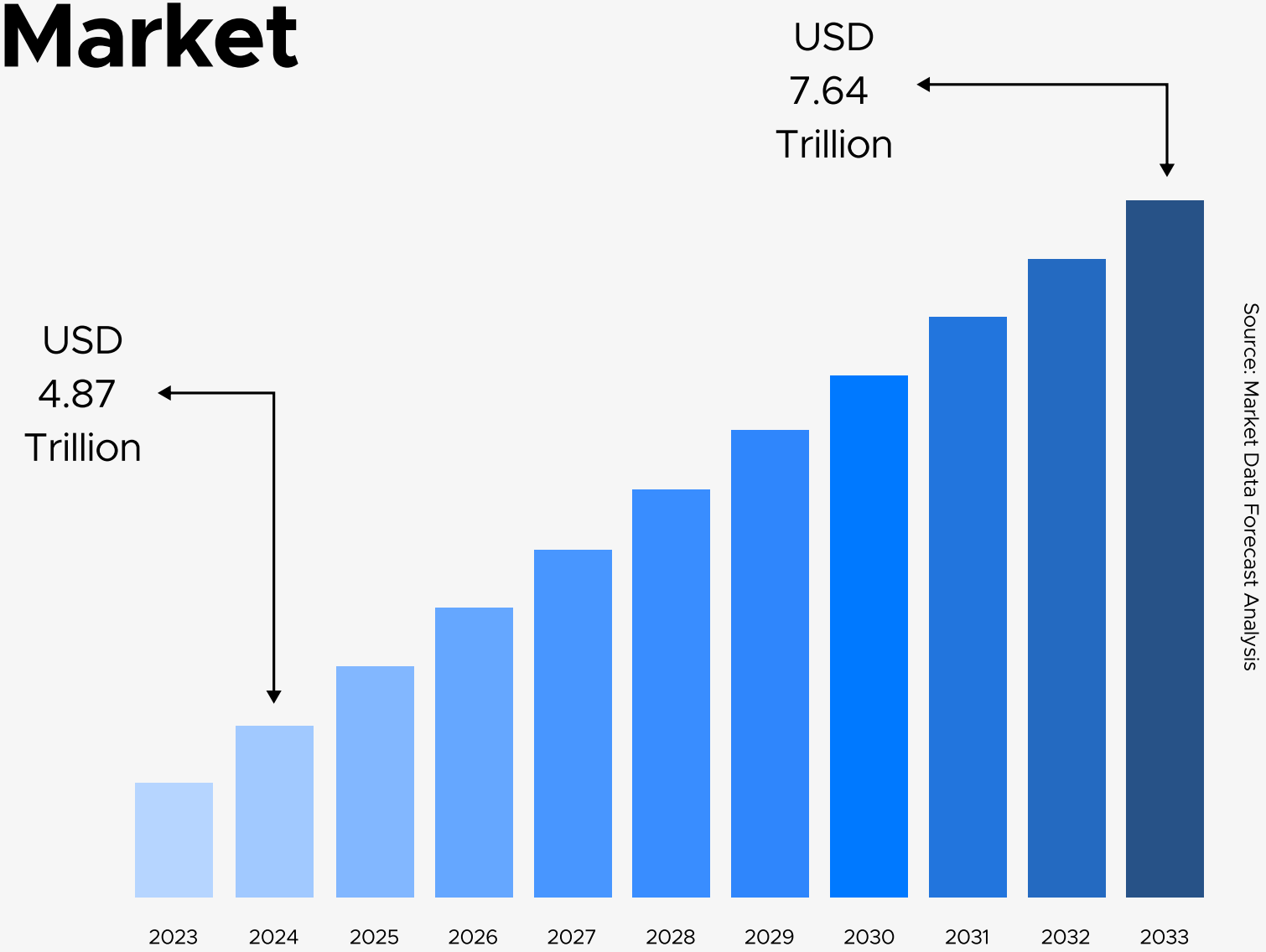
Seasonal healthcare challenges — staff shortages, documentation backlogs, high call volumes — are now permanent. Leaders are pushed **to deliver more, faster, and safer at lower cost,** while operating with outdated workflows, fragmented systems, and stretched teams.

AI is no longer a nice-to-have or a pilot experiment. But simply adding tools won't move the needle. Real impact comes from fixing the underlying operations: **how work flows, how data moves, and where time is truly lost.**

This guide is designed to help leaders address exactly those fundamentals.

U.S. Healthcare Market

Market Size Overview



5.80%

U.S Market CAGR,
2025 - 2033

The Market Reality: Healthcare's Current Operating Model Can't Keep Up

Three macro forces are reshaping healthcare simultaneously, and each one directly affects whether AI succeeds or fails:

1. Structural Workforce Shortages

According to the Association of American Medical Colleges, the US may face a shortage of up to 124,000 physicians by 2034, while nursing vacancies remain at historically high levels. McKinsey estimates that clinical support staff spend up to 30% of their time on administrative tasks, rather than on clinical care.

2. Administrative Load Growing Faster Than Care Demand

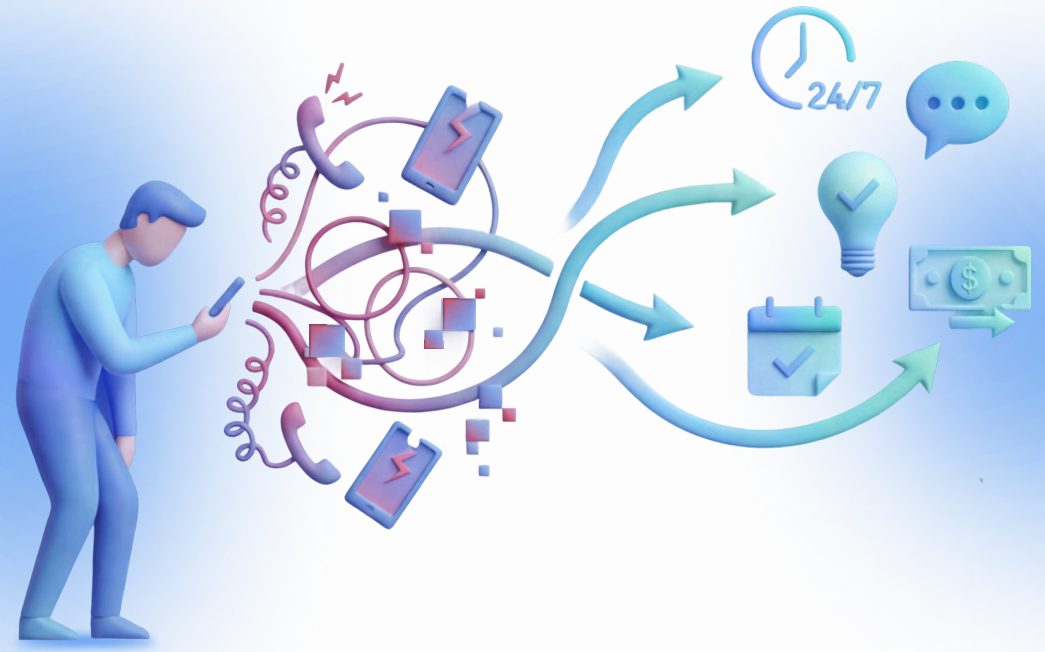
Recent national analyses from Health Affairs and Peterson-KFF estimate that the U.S. spends nearly **$1 trillion annually** on administrative activities, accounting for approximately one-quarter of all healthcare spending. A 2025 review of Medicare Cost Reports indicates that administrative functions account for approximately **17% of hospital expenses.**

Meanwhile, AMA workflow surveys indicate that for every 8 hours of scheduled patient time, doctors spend nearly **6 hours (or 75% of their working hours)** working on documentation and Electronic Health Record (EHR) updates, rather than on patient care.

3. Patient Expectations Have Shifted Permanently

Patients increasingly expect **timely, seamless, and coordinated experiences:** 24/7 availability, self-service, instant answers, appointment control, and transparent billing. Rising expectations create operational load that traditional call centers and portal-first solutions can no longer absorb.

Hence, healthcare leaders are prioritizing efficiency and workforce protection not just to reduce cost, but to maintain service levels and revenue integrity.



Where the Pressure Shows Up Day to Day

Despite differences in size, geography, or specialty, healthcare organizations report almost identical operational bottlenecks:

Intake and triage

Front desks and call centres handle symptom descriptions, form filling, and fundamental questions under time pressure. This leads to long queues, rushed decisions, and routing that is not always aligned with urgency.

Compliance and audit

Monitoring adherence to the Health Insurance Portability and Accountability Act (HIPAA), Centers for Medicare & Medicaid Services (CMS) billing requirements, and internal compliance protocols is often reactive and based on limited samples. Teams spend many hours preparing for audits, manually reviewing documentation, and attempting to identify gaps after the fact.

Claims, billing, and revenue cycle

Claims and prior authorizations remain highly manual. Atlantic RCM reports that up to 87% of denials are preventable, often caused by registration errors or missing information. Optum's 2024 Denials Index reveals an average denial rate of 12%, with eligibility issues accounting for approximately a quarter of cases.

Scheduling and no-shows

Manual booking, reminder calls, and last-minute changes result in long wait times and no-show rates that can reach 30% in certain specialties (Evaluation of Clinical No-Show Rates in the Setting of an Outpatient Internal Medicine Residency Clinic). Teams spend hours each day coordinating calendars instead of working at the top of their license.

EHR and documentation

For every hour of face-to-face clinical care, physicians spend nearly two additional hours updating EHRs and performing desk work, often extending into the evenings. Documentation is essential, but the way it gets done today is a major driver of burnout.

What AI Agents Actually Bring to the Table

Most organizations have tried chatbots, predictive models, or documentation tools. AI agents are next: they move beyond answers to handling tasks and decisions. At their core, AI agents combine:

1. Context understanding:

Leverage large language models to interpret unstructured data, grasp intent, and tailor responses to each patient, claim, or encounter.

2. System action:

Interact securely with EHRs, CRMs, billing platforms, and scheduling tools — moving beyond a simple chat interface.

3. Workflow execution:

Carry out multi-step tasks like scheduling appointments, checking eligibility, updating records, and sending reminders within your defined guardrails.

4. Learning from usage:

Identify new intents, content gaps, and edge cases from real interactions, helping teams continuously improve processes.

In practice, this means transitioning from “AI that answers questions” to AI that completes tasks, with precise monitoring and escalation paths in place.

AI Agent Use Cases That Move the Needle in Healthcare

With the operational landscape clear, the next step is to identify where AI agents deliver a measurable impact.

The following use cases show how healthcare organizations are achieving real outcomes by connecting specific bottlenecks to practical agent patterns.

01

Patient Education & Disease Awareness

For chronic and high-risk conditions, information is complex, fragmented, and rarely written for real people.

1.1 Current Gaps in Operations

- Patients often struggle to understand diagnoses, treatment options, and test results.
- Doctors and genetic counselors repeat the same “baseline” explanations over and over.
- Underserved communities (e.g., Black patients, women in low-resource settings) lack **trusted, culturally appropriate** information.
- Brand and regulatory risk when patients rely on **unverified websites** or social media influencers.
- Limited staff and time to provide **continuous education** over the whole patient journey.

1.2 How AI Assistants Help

- AI agents become **always-on, conversational educators** that deliver consistent, validated information at scale:
- **24/7 educational chatbots** that explain diseases, treatments, side effects, clinical trials, and next steps in plain language.
- **Personalized flows** based on patient risk, test type, demographics, or language preferences.
- **Multilingual support** and culturally adapted tone to reach underserved groups.
- Embedded in **existing portals, websites, and messengers,** so there’s no new app friction.
- Ability to **adapt content** dynamically as guidelines change or new therapies launch.

1.3 How This Works in Practice (BotsCrew Clients)

Psoriasis Education Assistant – (NDA)

People living with psoriatic disease often face stigma, misinformation, and a lack of accessible, trustworthy education. Many patients struggled to find reliable guidance online, while clinical teams were unable to provide ongoing one-on-one support at scale.

BotsCrew, in collaboration with a global communications partner, developed an AI-powered assistant that provides personalized, conversational education across Facebook Messenger and the website. It later expanded into a full omnichannel ecosystem used across multiple countries.

What it does

- ✅ Provides validated education on psoriasis, symptoms, triggers, and lifestyle
- ✅ Helps patients prepare for physician visits and understand what to expect
- ✅ Recommends self-assessments such as the Dermatology Life Quality Index (DLQI) to help track condition impact
- ✅ Supports treatment adherence with ongoing, adaptive guidance
- ✅ Counteracts misinformation through consistent, evidence-based explanations
- ✅ Expands across channels as a unified patient-support ecosystem
- ✅ Continuously improves using real conversational insights

Impact

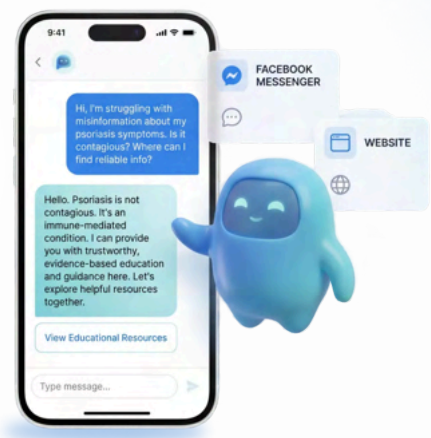
- **16,058** users in the first year
- **1,427** returning users
- **68,981** messages exchanged
- Evolved into a global omnichannel ecosystem supporting multiple markets

Recognition

- Finalist in Innovation in Healthcare Communication 2022

User Feedback

💬 **Quote:** *“An AI that’s as sympathetic as it is useful.”*



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Oncology Education Assistant for Black Patients – (NDA)

A web-based oncology assistant was created to support African-American cancer patients, an underserved group facing higher mortality rates, limited access to specialists, and deep medical mistrust. Before launch, many patients relied on scattered online sources and struggled to understand tumor testing, new therapies, and what questions to ask doctors.

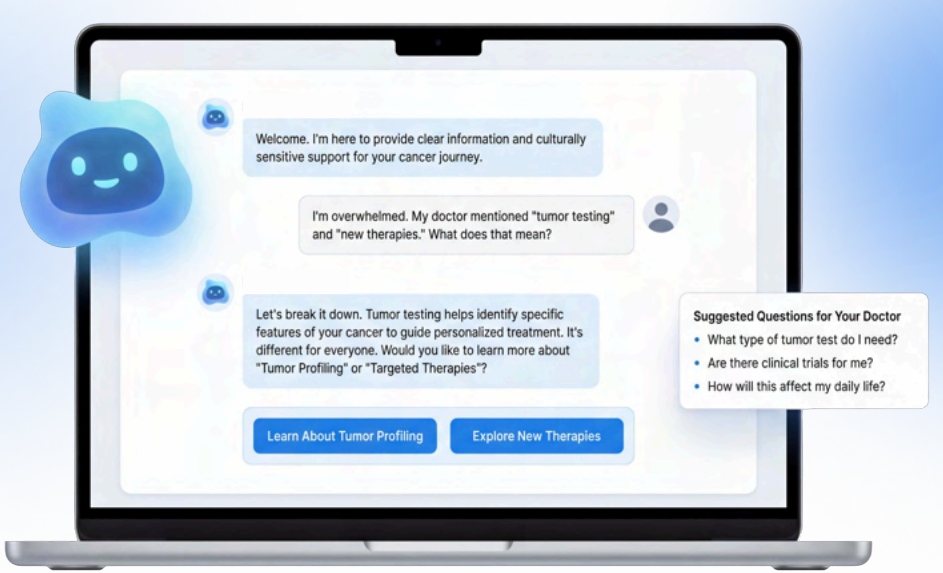
BotsCrew built a simple, trustworthy conversational tool that delivers clear education and culturally attuned support at scale.

What it does

- ✅ Explains immunotherapy, precision oncology, tumor testing, and clinical trials in plain, culturally adapted language
- ✅ Helps patients prepare for appointments and make informed treatment decisions
- ✅ Connects users to support groups, specialists, and local resources
- ✅ Allows users to submit medical questions for clinician follow-up via email
- ✅ Uses a persona and ToV (how the company communicates) explicitly designed for the Black patient community
- ✅ Reduces misinformation by providing medically reviewed, guideline-based answers
- ✅ Offers a scalable alternative to limited one-on-one education

Impact

- **95%** of users said the assistant was helpful
- **100%** reported that the information was clear
- Customer Net Promoter Score (cNPS) is **85**



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Women First Digital – Ally Bot (Reproductive Health & Safe Abortion)

A multilingual reproductive-health assistant supporting women globally, especially in low-resource settings where reliable, stigma-free medical information is scarce.

Women First Digital approached BotsCrew to rebuild their existing chatbot. The previous vendor's solution was costly, inflexible, slow to update, and produced inconsistent multilingual versions with weak analytics. They needed a faster, more stable platform delivered within one month.

What it does

- ✅ Provides clinically reviewed guidance on safe abortion methods, symptoms, after-care, and contraception
- ✅ Calculates pregnancy probability based on user inputs
- ✅ Helps users understand where and how to obtain abortion pills (location-aware flows)
- ✅ Connects women to qualified counselors when escalation is needed
- ✅ Works across web, WhatsApp, and Facebook
- ✅ Supports five languages: English, Spanish, French, Hindi, Swahili
- ✅ Delivers robust analytics via Google Data Studio (usage by geography, language, and topic)

Impact

- **52%** annual platform cost reduction after migration
- Substantially improved analytics, enabling better program planning
- **29,000 users** engaged with the chatbot in the first 6 months — **72%** of the annual target already reached
- Officially presented at **the International Conference on Family Planning Programming (2022),** highlighting global impact and capabilities.
- Expanded global reach through localized, accessible content

Client Feedback

💬 *"They made the process easy, even without my tech background... communication, consistency, creativity... more accurate and reliable data after migration."*

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02

Genetic Testing & Diagnostics – Pre/Post-Test Education & Counseling

Genetic & diagnostic testing volumes are growing much faster than the availability of trained professionals. Physicians spend nearly two extra hours on EHR and desk work, often late at night.

For genetic testing, this leads to long waiting times for counseling, confusion around complex reports, and high emotional stress for patients.

2.1 Current Gaps in Operations

- **Shortage of genetic counselors and specialists** to explain tests at scale.
- **Long waits** (often ~2 weeks) for patients to understand their results.
- High cost of one-to-one counseling for routine, low-risk cases
- Emotional stress while waiting can erode trust and compliance.

2.2 How AI Assistants Help

AI agents act as “first-line genetic educators”:

- **Pre-test education:** explain what the test does, why it matters, and who should take it.
- **Post-test flows:** interpret results in patient-friendly language and triage those who really need a human consultation.
- 24/7 **always-on access** via portals and websites, removing the “waiting for a call” bottleneck.
- Free up human counselors to focus only on **high-risk or complex** cases.

2.3 How This Works in Practice (BotsCrew Clients)

Natera – NEVA (Educational Virtual Assistant)

A unified virtual assistant supporting Natera's three major genetic tests, Horizon, Empower, and Panorama, by delivering pre- and post-test education, clarifying complex results, and helping determine who genuinely needs a genetic counselor.

NEVA addresses a critical bottleneck in genetic testing: the U.S. has only ~4,000 genetic counselors, resulting in wait times of around 2 weeks as patient volumes increase. NEVA provides immediate, personalized explanations at scale, improving patient clarity while reducing demand on clinical staff.

What it does

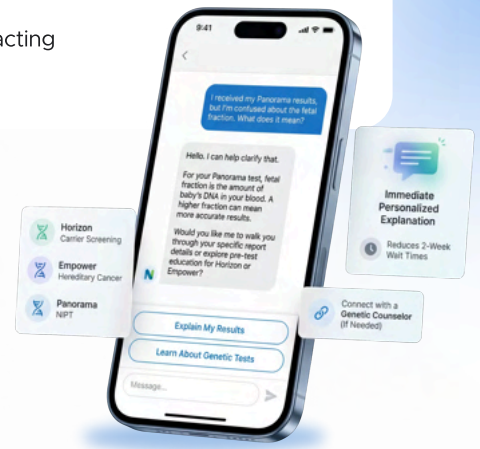
- ✅ Explains how each test works and the conditions it screens for
- ✅ Guides patients through pre-test preparation
- ✅ Delivers personalized education for both low-risk and high-risk results
- ✅ Clarifies next steps: follow-up testing, counseling, FAQs
- ✅ Reduces unnecessary counseling sessions via automated triage
- ✅ Adapts flows to each product's logic, risk thresholds, and terminology
- ✅ Integrates directly with the Natera Patient Portal
- ✅ Operates as one unified ecosystem across all three products

POC Results

- **125,300** total users served (web + phone)
- **65%** of patients did not need a counselor after AI explanations
- Successfully validated the concept and justified full-scale expansion

Full NEVA Ecosystem Results (Horizon, Empower, Panorama)

- **85%** overall flow completion
- **79.65%** completion for high-risk Panorama flows
- **90.59%** completion for low-risk Panorama flows
- Only **0.5%** of users required a human counselor after interacting with NEVA



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Genetic Testing Support Assistant – (NDA)

A hybrid **web + phone (IVR)** virtual assistant built for one of the world's leading genetic-testing laboratories. The goal is to reduce overwhelming call-center volume, provide 24/7 access to essential testing information, and streamline repetitive pre- and post-test workflows that previously required human agents.

This assistant supports patients through the entire testing lifecycle, from ordering and barcode registration to understanding timelines and next steps, while ensuring that responses remain accurate, accessible, and consistent at scale.

What it does

- ✅ Answers the most common genetic-testing FAQs (test types, timelines, results, payments)
- ✅ Let's check patients' test status and expected turnaround times
- ✅ Automates barcode/kit registration via chat or phone
- ✅ Supports appointment scheduling and follow-up coordination
- ✅ Provides simple, foundational explanations of genetic-testing concepts
- ✅ Operates across website chat and phone IVR to meet different user preferences
- ✅ Handles Level-1 inquiries autonomously, reducing call-center load
- ✅ Ensures 24/7 access for a high-volume, globally distributed user base

Impact

- **125,300** total users served (web + phone)
- **25%** of all support requests are fully automated
- **$131,149** annual savings
- Significant relief for a team of ~38 specialists by filtering out repetitive queries
- Reduced wait times (previous baseline: **25–30k calls/month** with **35% unanswered**)
- Faster access for patients needing immediate test information

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03

Clinical Trial Recruitment & Pre-Screening

Clinical trials are expensive and time-sensitive. Industry data shows:

✅ Around **80%** of trials fail to meet enrollment timelines

✅ Up to **8** million dollars per day can be lost when trials are delayed

✅ About **69%** of participants fail to meet eligibility criteria after prescreening

Most trials still rely on manual outreach, static landing pages, and phone screening, which are not built for this scale.

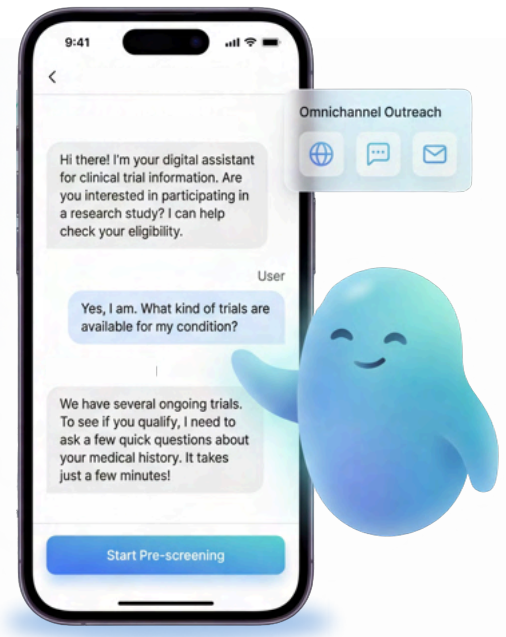
3.1 Current Gaps in Operations

- Failure to meet enrollment timelines.
- Large volumes of **unqualified leads.**
- Automates barcode/kit registration via chat or phone
- High manual cost to pre-screen participants.
- Difficulty raising awareness in target demographics.
- Poor experience for patients who drop off after long, confusing processes.

3.2 How AI Assistants Help

AI agents make recruitment and prescreening continuous, data-driven, and scalable:

- Run eligibility questionnaires automatically via chat (web, Messenger, SMS).
- Clarify trial conditions, visit schedules, compensation, and risks in natural language.
- Integrate directly with recruitment campaigns (e.g., Facebook Ads) via a chatbot.
- Qualify and score participants before they speak with humans, reducing staff workload.
- Help manage misinformation around trials (e.g, vaccines, new therapies).



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3.3 How This Works in Practice (BotsCrew Clients)

Urticaria Clinical Trial Assistant – (NDA)

A conversational pre-screening assistant built to accelerate recruitment for a chronic spontaneous urticaria (CSU/CIU) clinical trial. The study required a particular patient profile and involved intensive site visits (19 visits over 68 weeks), making traditional phone-based recruitment slow, costly, and inconsistent.

BotsCrew created an automated assistant that conducts prescreening directly inside Facebook Messenger, reducing friction, meeting patients where they already are, and filtering candidates before they reach the study team.

What it does

- ✅ Runs condition-specific prescreening inside Facebook Messenger (no app or portal needed)
- ✅ Asks eligibility questions on symptoms, diagnosis history, treatment response, and location
- ✅ Educates users on trial expectations, visit schedules, and participation commitments
- ✅ Routes eligible candidates to the nearest clinical trial site
- ✅ Fits into a multichannel funnel: **Facebook Ads → Chatbot → Eligibility → Site**
- ✅ Reduces manual screening time for research coordinators
- ✅ Uses messaging insights from agency partners to improve ad-to-chat conversion

Impact

- 2,000+ eligible patients identified across all acquisition channels
- Faster qualification compared to manual phone-based workflows
- Significant reduction in staff time spent on high-volume prescreening
- More consistent participant education, reducing early funnel drop-off
- Improved recruitment predictability through structured, eligibility-driven flows

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Curify – Trial Discovery & Matching

Curify set out to tackle one of clinical research's most significant bottlenecks: patients cannot easily find relevant trials, and sponsors struggle to reach, pre-qualify, and retain potential participants. Government registries like clinicaltrials.gov are challenging to navigate, and research teams spend enormous time filtering unqualified leads.

BotsCrew partnered with Curify to develop a comprehensive discovery and matching platform that streamlines trial exploration for patients while delivering reliable, high-quality recruitment pipelines for sponsors.

What it does

- ✅ Aggregates 65,000+ trials into a simple patient-facing interface
- ✅ Matches patients using eligibility criteria, diagnosis, demographics, and preferences
- ✅ Sends personalized study updates to maintain engagement over long timelines
- ✅ Operates in **a secure, HIPAA-ready environment**
- ✅ Powers a multi-partner recruitment network with **1.5M+ participants**
- ✅ Includes a COVID-19 misinformation-mitigation chatbot launched during vaccine trials
- ✅ Gives sponsors a consistent, data-driven enrollment funnel

Impact

- **13,000+** eligible candidates identified
- **6,000+** eligible patients referred
- **200+** enrolled across 12 studies
- Supported major trials, including **Moderna Phase 3** and **Novavax**
- Dramatically reduced manual prescreening through higher-quality matches
- Improved patient clarity and trust with conversational trial education

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04

Patient Support, Scheduling & Customer Service Automation

Access is now a frontline healthcare issue. Patients expect immediate answers, easy scheduling, and clear follow-ups, while providers and labs are forced to deliver all of it with lean, overstretched teams.

Behind the scenes, clinicians spend nearly **50% of their day on administrative work,** and admin costs absorb **25–30% of total healthcare spending.** Scheduling alone has become a major bottleneck. Manual booking and reminder calls drain staff time, introduce errors, and contribute to **no-show rates of up to 30% in certain specialties.**

4.1 Current Gaps in Operations

- High call volumes and long wait times.
- No 24/7 support.
- Staff are spending hours on **phone-based scheduling and rescheduling.**
- Poor visibility into upcoming no-shows and resource utilization.
- Burnout and turnover in contact centers.

4.2 How AI Assistants Help

AI agents make recruitment and prescreening continuous, data-driven, and scalable:

- Run eligibility questionnaires automatically via chat (web, Messenger, SMS).
- Clarify trial conditions, visit schedules, compensation, and risks in natural language.
- Integrate directly with recruitment campaigns (e.g., Facebook Ads) via a chatbot.
- Qualify and score participants before they speak with humans, reducing staff workload.
- Help manage misinformation around trials (e.g, vaccines, new therapies).

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4.3 How This Works in Practice (BotsCrew Clients)

Contact Center Automation Assistant – (NDA)

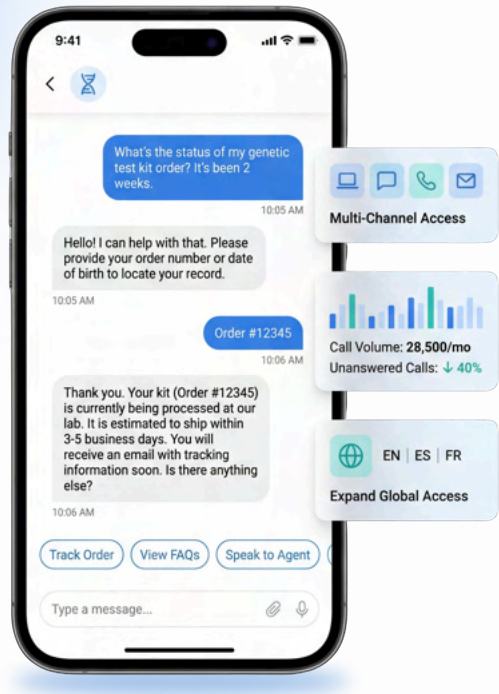
A multi-channel automation solution built for a high-volume genetic testing provider handling **25,000–30,000 calls per month.** The organization needed to reduce unanswered calls, streamline repetitive Level-1 inquiries, and expand access without increasing staff.

What it does

- Automates Level-1 support across web chat and phone IVR
- Answers routine questions about test preparation, status updates, timelines, billing, and FAQs
- Retrieves personalized information through backend integrations
- Supports barcode/kit registration, scheduling, and next-step coordination
- Provides consistent 24/7 guidance across channels
- Delivers detailed analytics on automation rates, user behavior, and deflection

Impact

- Pre-AI baseline: **25–30k** calls/month, 35% unanswered
- Pilot: **4,023** users, **15%** automation
- Full rollout: **36,095** users, **27%** automation, **$11,438** saved in 7 months
- IVR automation: **22%** of calls resolved, **$3,049** saved in one month
- Total: **125,300** users, **25%** automation, **$131,149** yearly savings



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05

Telehealth & Clinical Staff Support (Care Delivery)

According to the AMA, physicians spend almost twice as much time on EHR and desk work as on face-to-face clinical time. In many long-term and social care settings, staff also work across:

- Fragmented documentation
- Multiple systems and formats
- Constant context switching

The result is wasted time, lower-quality documentation, and higher burnout.

5.1 Current Gaps in Operations

- Fragmented documentation and care plans; information scattered across systems.
- Difficult access to up-to-date guidelines and internal policies.
- Inefficient communication between carers, managers, and admins.
- Hours lost on repetitive, non-clinical tasks.

5.2 How AI Assistants Help

5.2.1 AI for Telehealth & EHR Documentation

From the article: AI scribes and documentation agents can:

- Convert voice to text during consultations.
- Structure and enter data into the EHR automatically.
- Generate clinical summaries, discharge notes, and referrals.
- This can reduce documentation time by **up to 45%,** improve accuracy, and massively reduce after-hours EHR work.

5.2.2 AI-Powered Telehealth Assistants for Staff

- Unified, conversational access to policies, patient records, and knowledge bases.
- Multi-role support (carers, managers, admins, super admins).
- Automated competency checks, quizzes, and training support.
- Voice-based interactions for hands-busy environments (e.g., home visits).

5.3 How This Works in Practice (BotsCrew Clients)

AI Telehealth Assistant for Social Care – (NDA)

A unified assistant for carers, managers, and administrators working in home-care and social-care settings where documentation and communication are fragmented.

What it does:

- ✅ Delivers real-time answers via web and mobile, including **voice interactions**
- ✅ Separates **general knowledge** from **patient-specific** conversations for safety
- ✅ Provides automated competency checks and micro-learning flows for carers
- ✅ Offers admin dashboards for oversight, trend monitoring, and compliance support
- ✅ Reduces duplication by centralizing knowledge previously scattered across PDFs, emails, and intranet pages

Impact

- Faster access to policies and patient information
- Reduced administrative load for care teams
- Improved documentation consistency and quality
- Roadmap includes: **AI scribe,** deeper **EHR integrations,** and structured care-plan automation

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06

Public Health, Mental Health & Social Good

NGOs, social enterprises, and public programs often carry heavy responsibility with limited budgets and staff:

- Services are sparse, especially in low-resource settings
- Topics like abortion or loneliness often come with stigma and privacy concerns
- Content is rarely localised for language, literacy level, or culture
- There are not enough counselors or volunteers to support everyone who needs help

The result is wasted time, lower-quality documentation, and higher burnout.

6.1 Current Gaps in Operations

- Limited local support, especially in low-resource settings.
- Stigma and privacy concerns around topics like abortion or loneliness.
- Language barriers and lack of tailored content.
- Scarcity of human counselors and volunteers.

6.2 How AI Assistants Help

- **Anonymous, 24/7, multilingual** access to sensitive information.
- Automated flows that **identify risk and escalate** to humans where needed.
- Connect users to local services, hotlines, or volunteers.
- Collect anonymized data to understand needs and improve programs.

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6.3 How This Works in Practice (BotsCrew Clients)

Carbon Upcycling – Anna Bot

A voice-first companion app designed to reduce loneliness among elderly people through simple, stigma-free communication with trained volunteers. Carbon Upcycling Technologies (CUT) aimed to support seniors with poor eyesight, limited mobility, or low digital literacy, users who often struggle to engage with text-based apps.

BotsCrew partnered with CUT to develop Anna Bot, a conversational assistant focused on ease, warmth, and accessibility.

What it does:

- ✅ Enables voice-message communication through speech-to-text (STT) and text-to-speech (TTS), eliminating the need for typing
- ✅ Connects older adults with volunteers for conversation, emotional support, and well-being check-ins
- ✅ Uses extra-large buttons and a simplified interface tailored for low digital literacy
- ✅ Tags emotional tone in conversations so moderators can spot distress or behavioural changes
- ✅ Tags emotional tone in conversations so moderators can spot distress or behavioural changes
- ✅ Includes an admin panel for volunteers to manage chats, review sentiment, and respond quickly

Impact

- Expanded support to users who typically avoid text-heavy apps by enabling natural voice interaction
- Boosted volunteer capacity through streamlined workflows and quick sentiment visibility
- Delivered emotional analytics that help social programs spot isolation risks
- Enhanced user comfort and willingness to engage through a simple, stigma-free channe

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07

Public Health, Mental Health & Social Good

Large healthcare organizations and pharma companies need more than a single chatbot. They require a scalable AI platform capable of deploying multiple AI assistants across brands, markets, languages, and channels, all while maintaining security, compliance, and consistent performance.

7.1 Current Gaps in Operations

- Fragmented initiatives managed by different vendors.
- No consistent analytics or governance.
- High duplication of work across markets.
- Maintaining compliance and brand consistency can be a challenging task.

7.2 How AI Platforms Help

- **Centralized platform** to create, configure, and manage many AI agents.
- Integrations with internal systems (CRM, DAM, portals, EHR, contact center).
- Shared NLP, analytics, and content tooling.
- Collect Global templates adapted locally. data to understand needs and improve programs.

7.3 How This Works in Practice (BotsCrew Clients)

Global Conversational Platform – (NDA)

A global pharmaceutical company required a single, scalable solution to create and manage patient-support chatbots across multiple markets. Previously, each country built its own assistant with different vendors, resulting in duplicated work, inconsistent patient experiences, and difficult compliance oversight.

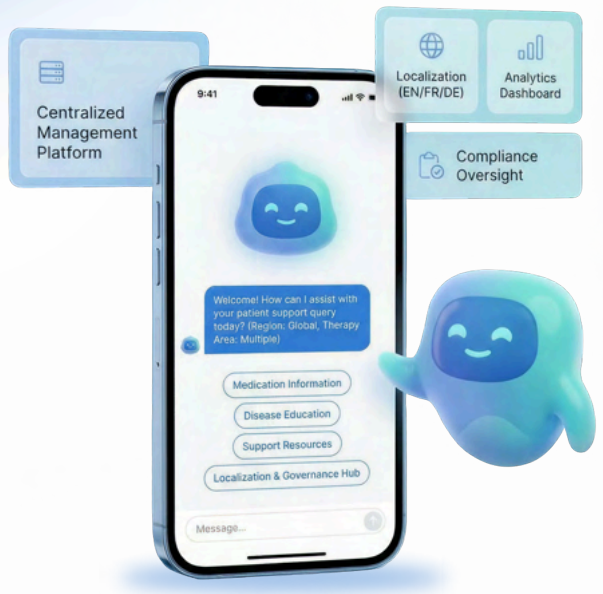
BotsCrew partnered with the client (alongside an external communications agency) to build an enterprise platform that centralizes chatbot creation, localization, governance, and analytics. Today, it powers an extensive network of assistants across therapy areas and regions.

What it does:

- ✅ Centralizes chatbot development, configuration, and governance in one enterprise platform
- ✅ Integrates with core systems: Azure, LUIS (NLP), Salesforce, DAM, Weather API, Messenger, Genesys Live Chat
- ✅ Provides reusable, compliant components for education, onboarding, adherence, and long-term patient support
- ✅ Allows local markets to adapt language and content while keeping global standards and oversight
- ✅ Delivers unified analytics dashboards with cross-market visibility
- ✅ Supports omnichannel deployment across web, Messenger, and other patient touchpoints
- ✅ Scales easily as new therapy areas and markets join the ecosystem

Impact

- **25+** chatbots deployed globally
- Live in **20** multilingual markets
- Engagement: 7+ messages per session, **16.4** minutes average session time
- **33%** returning user activity, showing sustained patient value
- Eliminated redundant market-by-market builds
- Strengthened global compliance, consistency, and patient experience



Conceptual visual for demonstration purposes only.

HIPAA, Compliance & Safety Checklist for Healthcare AI

Deploying AI in healthcare comes with enormous promise — but also significant risks. Organizations face:

- **Regulatory pressure:** HIPAA violations can cost millions in fines and irreparable reputational damage
- **Hidden vulnerabilities:** AI systems introduce new security risks, from data leakage to biased predictions affecting patient care.
- **Vendor accountability:** Third-party AI providers may not fully adhere to your compliance standards.
- **Operational complexity:** Managing AI governance, auditability, and lifecycle maintenance is non-trivial.

Address these challenges and deploy AI safely, legally, and effectively with the checklist below.

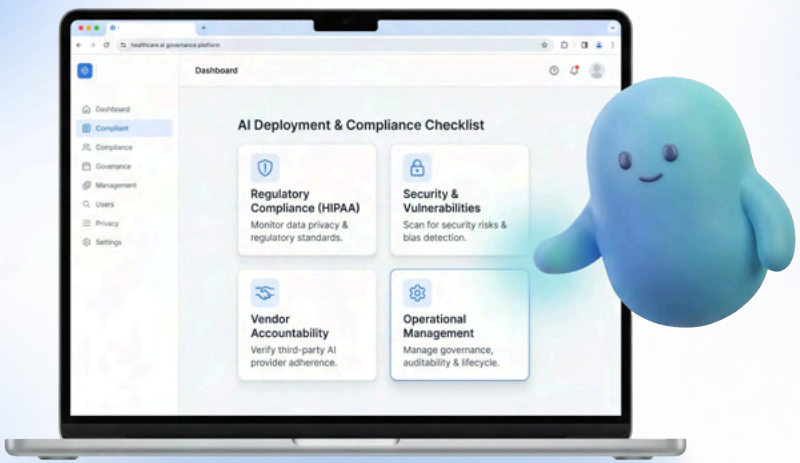
Step 1. Assign Responsible Staff

Designate a **Privacy Officer** and a **Security Officer Data Protection Officer (DPO) or a compliance lead.** They oversee:

- Risk assessments
- Employee training
- Data protection strategy and policy updates.

Step 2. Conduct a Data Audit

- Inventory all data types and systems (CRM, EMR, HR, analytics, etc.).
- Document how data enters, moves, and exits your organization (data flow maps).
- Tag and classify data as PHI, personal data, or sensitive data.
- Keep this inventory updated after system or vendor changes
- Create a **Risk Analysis Report** for HIPAA.



Conceptual visual for demonstration purposes only.

Step 3. Ensure Lawful Basis for Processing

You need a legal reason to process data — otherwise, it's a compliance breach. Processing PHI is allowed under specific circumstances:

- **Treatment:** delivering healthcare.
- **Payment:** billing, claims, reimbursements.
- **Healthcare Operations:** administrative, quality improvement, or auditing tasks.

For any activities beyond these (e.g., marketing or research), explicit patient authorization **is required.**

Checklist:

Identify and document the lawful basis for each processing activity.

Keep consent logs (when, how, and for what purpose consent was given).

Enable users to withdraw consent easily.

Review your data processing justifications annually.

Step 4. Publish and Maintain a Privacy Policy

Individuals must be aware of what happens to their data. You must provide a **Notice of Privacy Practices (NPP)** explaining how PHI is used and shared. It must be available at the point of care or via your website.

Checklist:

Write your privacy policy in plain language (no legal jargon).

Include contact info for your Privacy Officer or DPO.

Update whenever processes or vendors change.

Keep version control for audit purposes.

Step 5. Ensure Access Control & Authentication

Limit data access strictly to those who need it. Access to PHI must be role-based — only those involved in patient care, billing, or operations should have access.

Checklist:

Define user roles and access levels.

Enforce Multi-Factor Authentication (MFA).

Automatically deactivate inactive or terminated accounts.

Maintain access logs and review them monthly.

Use unique user IDs — no shared credentials.

Step 6. Set Up Data Security Measures

Protect data from unauthorized access, breaches, or loss.

Checklist:

Encrypt all PHI/personal data in transit (TLS/SSL) and at rest (AES-256).

Use secure, HIPAA-compliant cloud services (AWS, Azure, GCP with signed BAAs).

Implement firewalls, intrusion detection, and anti-malware tools.

Regularly test and patch vulnerabilities.

Apply device management policies (MDM) for laptops, phones, USBs.

Conduct annual penetration testing.

Step 7. Minimize Data Collection

Collect only what is needed — and delete what's not. Keep PHI only as long as required by law or as necessary for business purposes. No explicit time frame is defined, but retention should follow state or organizational policy.

Checklist:

Review data collection forms and eliminate unnecessary fields.

Define data retention schedules (e.g., delete records after 7 years).

Securely erase data using certified tools.

Review retention policy annually.

Step 8. Configure Your Website and Apps

Ensure all data transmission is encrypted and PHI is never exposed to third-party analytics.

Step 9. Create Internal Policies and Procedures

Notify affected individuals, the HHS, and (if >500 records) the media within **60 days.**

Document all breaches and mitigation steps.

Checklist:

Maintain an Incident Response Plan (IRP).

Define clear roles: who investigates, communicates, and documents.

Train staff on how to recognize and report incidents.

Keep a breach register (even for non-reportable incidents).

Conduct post-incident reviews and update policies.

Step 10. Train Employees

What counts as personal or sensitive data

How to securely handle it

How to recognize and report a breach.

Step 11. Set Up Data Subject / Patient Request Processes

Provide a contact channel for access, deletion, or correction requests.

Respond within the required timeframes (60 days for HIPAA).

Document all requests and responses.

Ready to Transform Healthcare with AI?

Don’t just explore AI — deploy it safely, smartly, and at scale.

Our team helps healthcare organizations, including Fortune 500 companies, build AI solutions that improve patient care, streamline operations, and stay fully compliant.

What we do:

1. Design custom AI solutions tailored to your workflows — from administrative automation to clinical decision support, fully integrated with EMR/EHR systems.
2. Ensure HIPAA compliance and patient data safety — including data minimization, pseudonymization, and continuous privacy monitoring.
3. Deploy with governance, monitoring, and continuous improvement — track model drift, bias, and operational performance over time.
4. Evaluate and manage third-party AI vendors — ensure external solutions meet your compliance, security, and operational standards.
5. Rapid prototyping and pilot programs — validate feasibility and ROI before full-scale implementation.
6. Future-proof AI strategy — roadmap for AI lifecycle management, updates, and enterprise adoption.

Fill the form to schedule a consultation and start building your safe, compliant, and scalable healthcare AI solution today.

BotsCrew was an incredible partner from inception to launch. The team was proactive, well-organized, and flexible.They are deeply committed to achieving successful outcomes and exceeding expectations.

We're delighted to have found such a dedicated partner and would recommend them to anyone looking for voice assistant experts.

Melissa M. Senior Manager
Natera

Read the case study

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Jacklyn Trejo Product Manager
Samsung NEXT

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