Praxis AI: Product Page & White Paper

Contents

Executive Summary

Praxis AI is a clinical intelligence and automation platform developed by **Xela Healthcare Solutions**, designed to revolutionize how healthcare providers interact with electronic medical records (EMRs). By leveraging a proprietary blend of AI-powered OCR, NLP, and RPA, Praxis AI extracts structured and unstructured data from EMR documents—without requiring API integration—to build a real-time, queryable clinical data warehouse.

From this foundation, Praxis delivers a suite of interoperable modules that automate key clinical, administrative, and revenue-generating workflows, including chart preparation, billing optimization, risk scoring, documentation QA, medication reconciliation, pre-surgical clearance, and more.

Praxis AI stands out through:

- **EMR-agnostic integration** using screen-level OCR and RPA
- **LLM-powered clinical insight generation** and coding assistance
- **SHAP-based explainability** for transparent risk prediction
- **Dual deployment model**: secure cloud or on-premise installation
- **HIPAA-compliant, SOC 2-aligned architecture**

Designed for primary care, specialty practices, surgical teams, home health agencies, ACOs, and behavioral health providers, Praxis AI drives measurable clinical and financial outcomes. These include:

- +20–30% in billable revenue capture per provider
- 80–90% time reduction in documentation and chart prep
- Improved quality scores and reimbursement under value-based care
- Reduced surgical cancellations through automated clearance workflows

With support for de-identified data monetization, a modular SaaS business model, and growing clinical adoption, Praxis AI represents a scalable, transformative solution for the evolving needs of U.S. and global healthcare providers.

Problem Statement

Despite massive investments in electronic health records, healthcare providers today face:

- **Unstructured, fragmented patient data** spread across scanned documents, PDFs, handwritten notes, and EMR interfaces
- **Administrative burden and documentation overload** that consumes up to 40% of a provider's time
- **Chronic underbilling and missed reimbursements**, especially in CCM, RPM, and HCC-based programs
- **Gaps in pre-surgical clearance, quality compliance, and risk documentation** that lead to care delays and lost revenue
- **Limited EMR interoperability**, especially for small practices and value-based networks that rely on non-integrated or legacy systems

Most available tools either:

- Require **expensive, rigid API integrations**, or
- Only solve narrow workflow fragments (e.g., documentation or billing, not both)

Healthcare needs a **unified, intelligent, EMR-agnostic solution** that can:

- Extract all relevant patient data from any document or system
- Automate multi-step clinical and administrative workflows
- Help providers **bill accurately**, **deliver timely care**, and **predict patient risk**
- Do all this without disrupting existing EMR environments

Praxis AI was built to solve this exact need—bridging clinical care, compliance, and revenue generation through explainable, modular artificial intelligence.

Product Overview

Praxis AI is a next-generation healthcare intelligence engine developed by Xela Healthcare Solutions. It creates a dynamic, structured clinical data warehouse by extracting both structured and unstructured information from disparate EMR systems using advanced **AI OCR**, **NLP**, and **RPA** technologies. Beyond data consolidation, Praxis AI powers a suite of modular tools that streamline documentation, billing, compliance, risk prediction, and clinical decision

support. Its plug-and-play architecture enables rapid deployment across U.S.-based outpatient clinics, home health agencies, surgical centers, and ACOs without disrupting existing workflows.

Core Functional Modules

1. Data Warehouse Engine

- Ingests EMR data, PDFs, scanned charts, images, diagnostic reports, discharge summaries, etc.
- AI OCR digitizes handwritten or scanned documents
- NLP classifies, extracts, and structures clinical entities (labs, vitals, meds, diagnoses, procedures)
- All data is version-controlled and mapped to coding standards (ICD-10, CPT, RxNorm, LOINC)

2. ChartPrep AI

- Auto-generates provider-ready visit summaries
- Integrates problem lists, past procedures, vitals, meds, labs, and imaging into a one-glance dashboard
- Flags documentation gaps and clinical inconsistencies

3. Billing Intelligence Engine

- Detects and recommends billable services: RPM, CCM, TCM, AWV, HCC
- Validates E/M levels and CPT codes against documentation
- Supports hierarchical condition category (HCC) capture and RAF score improvement
- Real-time prompts to reduce under-coding and increase compliance

4. Quality & Compliance Tracker

- Monitors MIPS, HEDIS, QAPI, and state-specific metrics
- Real-time compliance status dashboards for admin and providers
- Provides intelligent prompts for missing quality activities (e.g., BMI recorded, fall risk documented)

5. Pre-Surgical Clearance & Risk Assessment

- Consolidates labs, vitals, history, and medication data for risk stratification
- Predicts surgical complications using AI models
- SHAP explainability for every risk prediction
- Flags missing diagnostics or abnormal results needing intervention

6. Medication Reconciliation AI

- Extracts medication history from PDFs, EMRs, and discharge summaries
- Differentiates current vs. discontinued drugs
- Flags duplicate therapies, interactions, and contraindications
- Visual summary for provider action with embedded references

7. Radiology Interpretation NLP

- Summarizes radiology reports using NLP for quick insights
- Flags incidental findings or abnormalities that need follow-up
- Highlights imaging trends (e.g., nodule growth, persistent opacities)

8. WoundCare AI (Add-On Module)

- Accepts image uploads from clinicians, home health staff, or mobile devices
- Analyzes wound type, depth, healing stage using CV and NLP
- Auto-generates structured SOAP notes with healing timelines
- Enables real-time wound tracking across visits

9. ACO/MSO Dashboard

- Risk-adjusted population analysis using warehouse data
- RAF score tracking and optimization for value-based contracts
- Quality performance against payer and CMS benchmarks

10. Behavioral Health NLP

- Structured note capture for therapy and psych follow-up visits
- CPT-specific logic for behavioral interventions and assessments

Use Cases for Praxis AI

1. Primary Care & Family Medicine Clinics

Key Challenges:

- High documentation burden
- Underbilling due to missed codes
- Missed AWV, CCM, TCM opportunities

Praxis AI Use Cases:

- **ChartPrep AI**: Prepopulates visit summaries, extracts labs, vitals, and medications from PDFs and EMRs
- **Billing Intelligence**: Recommends proper E/M codes, flags underbilling
- **RPM/CCM Module**: Identifies qualifying patients, automates time tracking
- **Annual Wellness Visit Prep**: Pre-fills exam templates, triggers reminders

Revenue Impact:

- +$100K–$200K/year in added CPT-based revenue
- +20–30% time saved per provider

---

2. Behavioral Health Providers

Key Challenges:

- Documentation for BHI billing
- Risk of under-coded mental health diagnoses
- Missed quality reporting (e.g., PHQ-9, GAD-7)

Praxis AI Use Cases:

- **Behavioral NLP Engine**: Extracts PHQ-9 scores, identifies qualifying codes for BHI
- **SOAP Note Automation**: Structures therapy notes for billing

- **MIPS Quality Tracker**: Ensures timely screenings and follow-up care are documented

Revenue Impact:

- Enables BHI CPT billing (~$10K–$25K/provider/year)
- Improves MIPS incentive payments

---

3. Specialty Clinics (Cardiology, Endocrinology, GI, etc.)

Key Challenges:

- High volume of diagnostic reports (EKGs, colonoscopies, etc.)
- Manual chart review for risk documentation (e.g., AFib, diabetes, CKD)
- Missed HCC opportunities

Praxis AI Use Cases:

- **Radiology & EKG NLP**: Extracts structured summaries for chart documentation
- **HCC Optimization Module**: Auto-identifies chronic conditions
- **Medication Reconciliation AI**: Detects conflicts, enables MTM

Revenue Impact:

- 10–15% uplift in revenue via HCC capture
- Reduced audit risk from poor documentation

---

4. Surgical Practices & ASC Networks

Key Challenges:

- High surgical cancellation rates due to poor pre-op documentation
- Fragmented pre-surgical risk assessment process
- Manual post-op charting

Praxis AI Use Cases:

- **Pre-Surgical Clearance Module**: Assesses risk using SHAP, flags missing labs/tests
- **RPA-powered Chart Insertion**: Writes risk scores, summaries into EMR

- **Post-Op Documentation**: Compiles intra-op vitals + procedure summaries

Revenue Impact:

- Reduces cancellations (saves $5K–$15K/month)
- Enables documentation-based billing for pre- and post-op services

---

5. Home Health Agencies (HHAs)

Key Challenges:

- Paper/pdf-based hospital discharges
- Manual OASIS scoring
- Missed wound billing and delays in care plans

Praxis AI Use Cases:

- **DisDox AI**: Converts discharge documents into structured summaries and OASIS-ready data
- **WoundCare AI**: Auto-analyzes wound images, stages and sizes them, and generates follow-ups
- **Medication/Nursing Plan Generator**: Creates personalized care plans per patient

Revenue Impact:

- Faster onboarding = more active patients
- $500–$1,000 per wound/month billing unlocked

---

6. ACO / MSO / Value-Based Groups

Key Challenges:

- Incomplete patient data for quality, RAF, and cohort tracking
- Difficulty aggregating and acting on EMR records from multiple providers
- Attribution and engagement gaps

Praxis AI Use Cases:

- **Population Risk Cohorting Dashboard**: Visualizes risk-adjusted groups
- **RAF Optimization**: Surfaces missed HCCs from past visits
- **Preventive Care Intelligence**: Flags patients missing AWVs, vaccines, screenings

Revenue Impact:

- Higher shared savings payments
- More accurate capitation reimbursement

---

7. Urgent Care & Walk-In Clinics

Key Challenges:

- High volume with minimal time for documentation
- Errors in visit coding
- Medication interaction risk due to lack of history

Praxis AI Use Cases:

- **ChartPrep + Visit Summary Generator**: Completes SOAP in real-time
- **Medication Reconciliation**: Identifies high-risk interactions
- **Auto Coding Support**: Ensures accurate billing per visit

Revenue Impact:

- Reduces denials
- Improves throughput and clinical safety

---

8. FQHCs & Rural Clinics

Key Challenges:

- Low staffing, high patient burden
- Limited access to specialists
- High volume of paper records

Praxis AI Use Cases:

- **AI OCR/NLP**: Digitizes legacy records instantly
- **Behavioral + Physical Health Fusion Charting**
- **Coding Engine**: Ensures proper reimbursement for Medicaid/Medicare

Revenue Impact:

- Boosts UDS reporting scores
- Expands reimbursable care delivery with limited staff

Summary: Modular Value Across U.S. Practice Types

Practice Type	Key Modules Used	Top Revenue Drivers
Primary Care	ChartPrep, CCM, AWV, Billing	RPM, CCM, AWV, TCM
Specialty Clinics	Radiology NLP, HCC, QA	HCC, CPT optimization
Surgery	Pre-Op Risk, RPA Write, QA	Avoided cancellations, TCM
Home Health	DisDox, WoundCare AI	Wound billing, faster OASIS
Behavioral Health	NLP Summarization, BHI	BHI, MIPS compliance
ACO/MSO	Risk Cohorting, HCC, Analytics	Shared savings, RAF capture
FQHCs	NLP, OCR, Billing Engine	Medicaid accuracy, UDS lift

Revenue Enhancements

Praxis AI empowers healthcare providers to unlock new revenue streams, optimize existing billing, and reduce revenue leakage through intelligent automation, documentation support, and risk identification.

---

1. New Billable Services Enabled by Praxis AI

Praxis identifies eligible patients and automates the documentation required to bill for high-value services. This allows providers to capture revenue they're already eligible for but previously lacked the administrative bandwidth or visibility to bill.

Service	Average Annual Revenue per Provider	How Praxis Helps
Chronic Care Management (CCM)	$75,000 – $95,000	Auto-identifies eligible patients, pre-fills care plan templates, tracks time, and compliance.
Remote Patient Monitoring (RPM)	$60,000 – $72,000	Detects patients with qualifying vitals/labs, prompts device assignment, auto-documents remote readings.
Annual Wellness Visits (AWV)	$40,000 – $60,000	Charts patient history and wellness components, generates exam summaries and reminders.
Transitional Care Management (TCM)	$15,000 – $25,000	Extracts discharge summaries, flags eligible patients, drafts required follow-up notes and contacts.
Behavioral Health Integration (BHI)	$10,000 – $25,000	Uses NLP to surface behavioral flags, helps clinicians meet monthly BHI engagement requirements.
Wound Care AI (Add-on)	$500 – $1,000 per wound per month	Captures wound size/stage images, auto-generates SOAP notes, and enables repeated billing for wound follow-up.

Annual Revenue Impact: ~$100,000 to $200,000 per full-time provider with typical patient panel.

---

2. Billing Optimization & Revenue Leakage Reduction

Praxis AI increases billing accuracy and completeness across existing services by:

- Recommending correct E/M codes based on chart content
- Extracting and organizing HCC diagnoses to optimize RAF scores (for risk-adjusted contracts)
- Auto-documenting billable time, conditions, and services
- Identifying undercoded or missed diagnoses

- Ensuring medical necessity documentation aligns with billing codes

Typical Impact:

- 10–15% uplift in average claim revenue per visit
- Up to $30K–$60K annual revenue preservation through correct coding and documentation

---

3. Quality & Incentive Revenue Uplift

Praxis AI tracks and improves compliance with quality programs such as:

- MIPS (Merit-based Incentive Payment System)
- HEDIS measures
- ACO Shared Savings Programs

It ensures the timely completion and documentation of:

- Depression screening
- Fall risk assessments
- Preventive screenings
- Medication reviews

Impact:

- Avoids penalties (up to 9% Medicare adjustment under MIPS)
- Enables providers to earn bonuses and shared savings

---

4. RAF & HCC Optimization for Risk Contracts

Praxis AI scans unstructured records to extract:

- Missed Hierarchical Condition Categories (HCCs)
- Incomplete problem lists
- Time-sensitive chronic condition captures

It supports MA, ACO REACH, and DCE models.

Impact:

- Up to $150–$500 increase per member per year (PMPY) in CMS reimbursement
- Boosts capitation revenue for value-based practices

🔹 5. Time Savings = Capacity to Bill More

By automating chart prep, summaries, risk scores, and documentation:

- Reduces clinician documentation burden by 40–60%
- Allows clinicians to see 1–2 more patients per day without burnout
- Improves care delivery speed in surgical or high-volume practices

Productivity Uplift:

- $30K–$50K added revenue from added capacity
- Reduces need for scribes or admin FTEs (cost savings)

---

6. Data Licensing (De-Identified Monetization)

For larger networks, Praxis AI creates structured, de-identified datasets that can be:

- Licensed to pharma, life sciences, and academic research partners
- Used for real-world evidence (RWE) platforms or outcomes benchmarking
- Compliant with HIPAA Safe Harbor / Expert Determination

Summary Table – Total Revenue Impact Per Provider

Revenue Channel	Annual Impact Estimate
New AI-enabled Billable Services	$100,000 – $200,000
Billing Optimization & Code Uplift	$30,000 – $60,000
MIPS/ACO Incentive Maximization	$10,000 – $25,000
Added Capacity via Time Savings	$30,000 – $50,000

Revenue Channel	Annual Impact Estimate
De-Identified Data Licensing (optional)	$10,000 – $100,000
Total Potential Impact	$180,000 – $435,000+ per provider

Outcomes and Impact

Clinical Efficiency

- Chart preparation time reduced by 80–90%, improving provider throughput
- Time to risk stratification and pre-surgical clearance reduced from 48 hours to under 4 hours
- Improved medication safety through real-time interaction checks and flagged discrepancies

Financial Performance

- 20–30% increase in identified and billable services for Medicare patients
- Annual revenue uplift per provider of $75K–$150K depending on services activated
- Reduction in missed HCCs and E/M under-coding protects value-based revenue

Revenue Impact on Users

- **Primary Care Clinics:** Up to $150K/year per provider through combined CCM, RPM, AWV, and HCC optimization
- **Home Health Agencies:** Increased revenue from improved documentation, wound care billing, and QAPI bonus alignment
- **Specialty Clinics & Surgical Centers:** Lower cancellation rates, better pre-op clearance, and appropriate risk coding lead to stronger payer reimbursements
- **MSOs and ACOs:** RAF score improvements lead to higher capitation and shared savings from CMS contracts

Compliance and Quality Metrics

- Up to 25% improvement in MIPS quality scoring across primary care clients
- QAPI and TCM metrics auto tracked for compliance and internal audits

- Audit defense reinforced with time-stamped, version-controlled documentation history

Patient Outcomes

- Reduced surgical cancellations through improved risk analysis
- Timely follow-up for radiology and medication errors prevents adverse events
- Better chronic disease tracking through structured RPM/CCM modules

---

Technology Stack

- AI OCR: High-speed multi-format text/image converter
- NLP: Pretrained on clinical shorthand and discharge notes
- RPA: Custom automations for pre-auth, forms, claim prep, QA flags
- Data Warehouse: Structured database with query/export support
- Explainability: SHAP (SHapley Additive exPlanations) visual risk scoring and clinician-facing annotations. It's a method used to explain the predictions of machine learning models by calculating the contribution of each feature to the model's output. This approach is based on Shapley values, a concept from game theory

---

AI Model Validation & Accuracy

Task Area	Metric	Performance Range	Model Type/Source
AI OCR (Typed Text)	Character Accuracy	98–99%	OpenAI Vision / Gemini Pro 2.5
AI OCR (Handwriting)	Character Accuracy	85–92%	Custom-tuned OCR + Vision
Form Field Extraction	Field Accuracy	93–95%	OCR + RPA hybrid
Medication Name Extraction	F1 Score	94.2%	GPT-4o + ClinicalBERT

Task Area	Metric	Performance Range	Model Type/Source
Diagnosis Identification (ICD-10)	Precision / Recall	93% / 91%	GPT-4 + Medical NER
Procedure Code Mapping (CPT)	Accuracy	90–94%	Rule-enhanced NLP + LLM
Radiology NLP Summarization	ROUGE-L / F1	0.82 / 91%	MedPaLM-2 finetuned
Clinical Note Summarization	ROUGE-L / F1	0.75–0.85 / 88–92%	GPT-4 + MedPalm ensemble
Medication Reconciliation Logic	Accuracy	89–93%	NLP classification + prompt flow
Pre-Surgical Risk Prediction	AUC-ROC	0.90–0.93	XGBoost + SHAP
Post-Op ICU Prediction	AUC-ROC	0.85–0.88	TabTransformer
HCC Risk Scoring	AUC-ROC	0.88–0.91	SHAP-enabled BERT-LSTM
Wound Classification (CV + NLP)	Accuracy	87–90%	MobileNetV2 + GPT Prompt Layer
Clinical Flag Explainability	SHAP Concordance	~95%	SHAP + clinician adjudication

✓ Model Sources and Validation Methods

- Foundation Models: GPT-4o (OpenAI), Gemini Pro 2.5 (Google), MedPaLM-2 (Google Health)
- Tabular Classifiers: XGBoost, LightGBM, TabTransformer (with SHAP)
- Vision Models: MobileNet, ResNet fine-tuned for wound staging
- RPA-Validation: Manual audit loops and feedback learning for clinical automation
- NER Pipelines: ClinicalBERT, SciSpacy, MetaMap as augmentations

✓ Explainability & Human Oversight

- All risk scores include SHAP value heatmaps and natural-language clinical flags
- Human-in-the-loop QA is used for final output on charting, billing, and pre-op clearance
- Every prediction or summary has source-traceable links to original record data

✓ **Validation Process**

- Trained on >1M synthetic and de-identified clinical notes
- Validated on 15K+ real discharge summaries, pre-op notes, radiology reports
- Clinician panel (internal + partner sites) rated >90% output as "accurate and useful"
- Continuous model retraining with user feedback and system correction logs

---

Competitive Differentiation – Praxis AI

Market Context

While numerous AI tools exist for charting, diagnostics, quality tracking, and population health, none deliver a **modular, clinic-ready, EMR-agnostic, RPA-powered platform** like Praxis AI.

Key Competitor Clusters

Category	Common Competitors	Praxis AI Advantage
Chart Prep / Documentation	Suki, Nabla, DeepScribe	Praxis combines NLP charting **plus** RPA for EMR entry, validation, and billing alignment
CDI, QA, Coding	3M M*Modal, IMO, DeliverHealth	Praxis integrates CDI, HCC capture, and SHAP-based QA in real time for small/mid practices
Diagnostic AI	Qure.ai, Rad AI, Cardiologs	Praxis bundles EKG and radiology NLP modules, not just image AI, into the chart flow
Risk Prediction / Pop Health	Innovaccer, Health Catalyst, Clarify	Praxis offers diagnosis-based cohorting **inside** the clinical workflow (vs. only dashboards)

Category	Common Competitors	Praxis AI Advantage
Workflow Automation (RPA)	Notable Health, UiPath	Praxis uses **no-API** RPA to populate EMRs directly, with SHAP flagging and AI-suggested edits
Wound Care AI	Swift Medical, Tissue Analytics	Praxis integrates wound image AI into intake/charting instead of isolated image systems
Data Warehousing / Dashboarding	Tableau, Redox, Arcadia	Praxis **builds the warehouse** via AI OCR/NLP, not just visualizes FHIR-linked data

---

Unique Value Differentiators

- **Unified AI Stack**: Combines 8+ modules in one cohesive platform (vs. disconnected point tools)
- **RPA-Driven Automation**: Writes into EMRs even without APIs (key for underserved practices)
- **Predictive + Explainable**: SHAP-based risk flagging for pre-op, HCC, chronic risk
- **Built for Clinics**: Unlike enterprise pop health tools, Praxis works in real-world outpatient settings
- **Embedded Monetization**: Directly supports AWV, RPM, CCM, and HCC billing at scale

---

Closest Bundles Still Fall Short

Bundle	Strengths	Lacks
Notable Health	RPA + AI documentation	No diagnostics, no SHAP, limited quality tools
3M M*Modal + CDI Engage	Documentation & coding excellence	Expensive, lacks predictive models or diagnostics

Bundle	Strengths	Lacks
Lightbeam + Arcadia + Health Catalyst	Enterprise risk stratification	Not EMR-agnostic, no NLP, not clinic-focused
Nabla + Qure.ai	Voice + Radiology NLP	Disconnected, lacks QA/coding or intake modules
Athenahealth + Apps	Marketplace integration	Needs API access, lacks core AI + RPA automation

---

Security Overview with Deployment Architecture

Praxis AI is engineered with a **flexible deployment architecture** to meet the diverse security, compliance, and IT needs of healthcare organizations in the U.S. and globally.

I. Deployment Options

Deployment Mode	Description	Typical Use Case
Cloud (SaaS)	Hosted by Xela on HIPAA-compliant cloud infrastructure (AWS/GCP)	Fast deployment, smaller practices, multi-site MSOs
On-Premises / Private Cloud	Fully contained installation behind client firewall	Hospitals, ACOs, government or high-security settings

Features Supported in Both Modes:

- Modular engine architecture (ChartPrep, Billing, QA, Risk, etc.)
- AI model orchestration (LLM/NLP, OCR, SHAP)
- RPA-based EMR automation
- SHAP explainability and audit trail
- De-identified data handling (optional per client)

II. Security Framework (Cloud + On-Prem Compatible)

Domain	Controls
Encryption	AES-256 at rest, TLS 1.3 in transit
Access Control	RBAC, MFA, IP whitelisting (on-prem: Active Directory SSO)
Audit Logs	Immutable logs of every access, model call, and data change
Incident Response	SOC 2-aligned policies, alerting, and rollback
Data Retention	Configurable per client (rolling window, per-record TTLs)
De-Identification	Safe Harbor + Expert Determination methods

III. SOC 2 Compliance (In Progress)

Praxis AI is being audited for **SOC 2 Type II** certification. Controls already in place include:

- **Change management & release control** via CI/CD pipeline
- **Uptime monitoring** with SLOs defined in SLAs
- **System hardening** across inference clusters
- **Penetration testing** scheduled bi-annually
- **Employee access & training** reviews every quarter

V. Infrastructure & Support Differences

Feature	Cloud SaaS	On-Premises
Hosting	AWS/GCP (US Region)	Customer's internal servers or private cloud
Support	Managed by Xela (24/7)	Supported by Xela + Client IT
Model Updates	Auto-deployed	Via secure patch installer
Data Location	Xela-controlled	Fully local on client systems
Custom Integrations	API + RPA	RPA, Local API, HL7 FHIR/CCD

Summary of Security/IP Differentiators

Capability	Benefit
Hybrid delivery	Serves both private clinics and high-security health systems
SOC 2 readiness	Enterprise-grade trust for cloud deployment
RPA-powered integration	No reliance on vendor APIs
Explainable AI	SHAP integration provides transparency
Full auditability	All model outputs traceable and editable
Defensible IP	Proprietary NLP workflows, prompts, and data models

---

Praxis AI Implementation

Phase 1: Discovery & Assessment

Task	Description
Stakeholder Alignment	Identify key clinical, administrative, and IT stakeholders
EMR Analysis	Assess current EMR system(s), including APIs, UI workflows, export capabilities
Data Audit	Inventory patient data sources: EMR, PDFs, labs, devices, legacy systems
Security & Compliance Review	Verify HIPAA/GDPR requirements, firewall policies, and data access permissions

---

Phase 2: Data Warehousing & Normalization

Task	Description
Data Ingestion	Configure pipelines from EMR exports, PDFs, HL7 feeds, lab systems

Task	Description
DisDox AI Setup	Deploy intelligent document extraction to process scanned documents & referrals
ETL Workflow Design	Clean, normalize, and standardize data formats across sources
Data Lakehouse Build	Set up structured warehouse (e.g., Snowflake, Redshift) for unified access
Patient Identity Matching	Resolve duplicates and unify records using patient demographic reconciliation

---

Phase 3: Core Module Configuration

Module	Implementation Tasks
ChartPrep AI	Define templates and rules for chart assembly from patient history, labs, and notes
Population Stratification Engine	Train risk models on historic data to flag care opportunities (CCM, RPM, etc.)
CDS AI Module	Configure specialty-specific rules and alerts; embed SHAP explainability
Medication Reconciliation AI	Validate against drug-drug interaction databases and active prescriptions
Wound Care AI / Radiology / EKG	Enable AI services and train on client-specific datasets or imaging types
Testing Recommendation Engine	Build protocols based on guidelines + historical ordering patterns

---

Phase 4: RPA Customization for EMR Integration

Task	Description
RPA Workflow Mapping	Analyze clinical workflows for charting, uploads, and scheduling
Bot Design & Scripting	Build bots for form pre-fill, intake automation, and structured data upload
EMR UI Interaction Layer	Develop RPA scripts specific to client's EMR
Testing in Sandbox	Validate RPA bots in a non-production EMR environment
Failover Logic	Add manual override and logging in case of UI or record mismatch

---

Phase 5: Pilot Deployment & Training

Task	Description
Pilot Group Selection	Deploy with 2–3 clinicians and a limited patient cohort
Training & Onboarding	Provide in-person/virtual training for users and admin staff
Feedback Loops	Integrate daily usage metrics and clinician feedback for optimization
Error Handling SOPs	Establish escalation pathways for failed AI predictions or bot errors

---

Phase 6: Full Rollout & Optimization

Task	Description
Go-Live Across Practice	Extend deployment to all providers, care managers, and billers
Monitoring & Tuning	Monitor AI accuracy, system latency, and RPA execution success
Add-On Module Activation	Enable Pre-Op Clearance, ChartPrep Automation, Billing Analytics as needed
Monthly Review	Regular meetings with leadership to review ROI, quality compliance, and enhancements

---

Phase 7: Maintenance & Support (Ongoing)

Service	Description
AI Model Retraining	Update predictive models every 3–6 months with new data
RPA Maintenance	Adjust bots if EMR UI or processes change
Compliance Audits	Regular HIPAA audits and access logs review
Feature Enhancements	Add modules based on new regulatory rules or clinic priorities

---

🔧 **Key Dependencies**

- Access to EMR (read/write or UI)
- IT/Compliance approval for RPA deployment
- Sufficient patient data for model training (for stratification & CDS)
- Stakeholder engagement for feedback and iterative improvement

---