



Transforming Healthcare Operations with Generative AI & Intelligent Automation

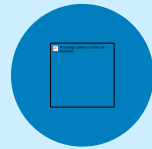
Using artificial intelligence to revolutionise patient care, streamline operations, and empower healthcare providers

Dr. Vishal Indurkhya

Chief Consultant: Hospital Planning & Management

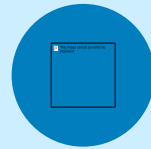
Gratitude Healthcare

The Healthcare Challenge Today



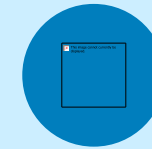
Patient Volume Pressure

Healthcare providers struggle to manage growing patient numbers whilst maintaining quality care standards



Coordination Complexity

Coordinating care across multiple specialists and departments creates administrative burdens and delays



Rising Costs

Escalating operational expenses threaten healthcare accessibility and financial sustainability

Physicians spend an average of **14 hours weekly** on administrative tasks, contributing to burnout and inefficiencies that directly impact patient outcomes and staff well-being.

What is Generative AI in Healthcare?

01

Content Creation

Algorithms generate text, images, and structured data tailored to healthcare contexts

02

Clinical Documentation

Automates patient notes, discharge summaries, and medical coding from consultations

03

Decision Support

Provides evidence-based recommendations and insights to enhance clinical judgement

04

Specialised Models

Built on large language models (LLMs) trained specifically on healthcare data and terminology



Key Use Cases in Healthcare Operations



Automated Clinical Notes

Transforms patient encounters into structured medical documentation instantly, capturing diagnoses, treatments, and follow-up plans



Prior Authorisations

Streamlines insurance approvals and revenue cycle management, reducing delays and denials



Population Health

Analyses patient data to identify risks, stratify populations, and enable proactive interventions



Resource Optimisation

Optimises supply chain management, bed allocation, and equipment utilisation across facilities



Impact on Clinical Workflow

AI Capture

Real-time documentation that listens to patient-provider conversations and creates accurate clinical notes without manual input

Time Savings

Reduces provider documentation time by up to **70%**, freeing hours for direct patient care

Enhanced Decisions

AI-generated insights surface relevant medical literature, patient history, and treatment options during consultations

Operational Efficiency & Cost Reduction

4x

Productivity Boost

Up to 4 times productivity increase in intake and prior authorization processes

70%

Time Reduction

Decrease in provider documentation time through automated clinical note generation

4x

Throughput Increase

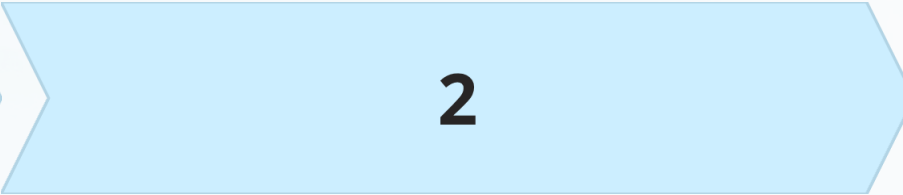
Enhanced patient throughput with automated clinical documentation systems



1

Automated Denials

AI identifies and corrects claim errors before submission



2

Revenue Accuracy

Improves coding precision and billing speed



3

Supply Chain AI

Reduces waste, delays, and inventory costs

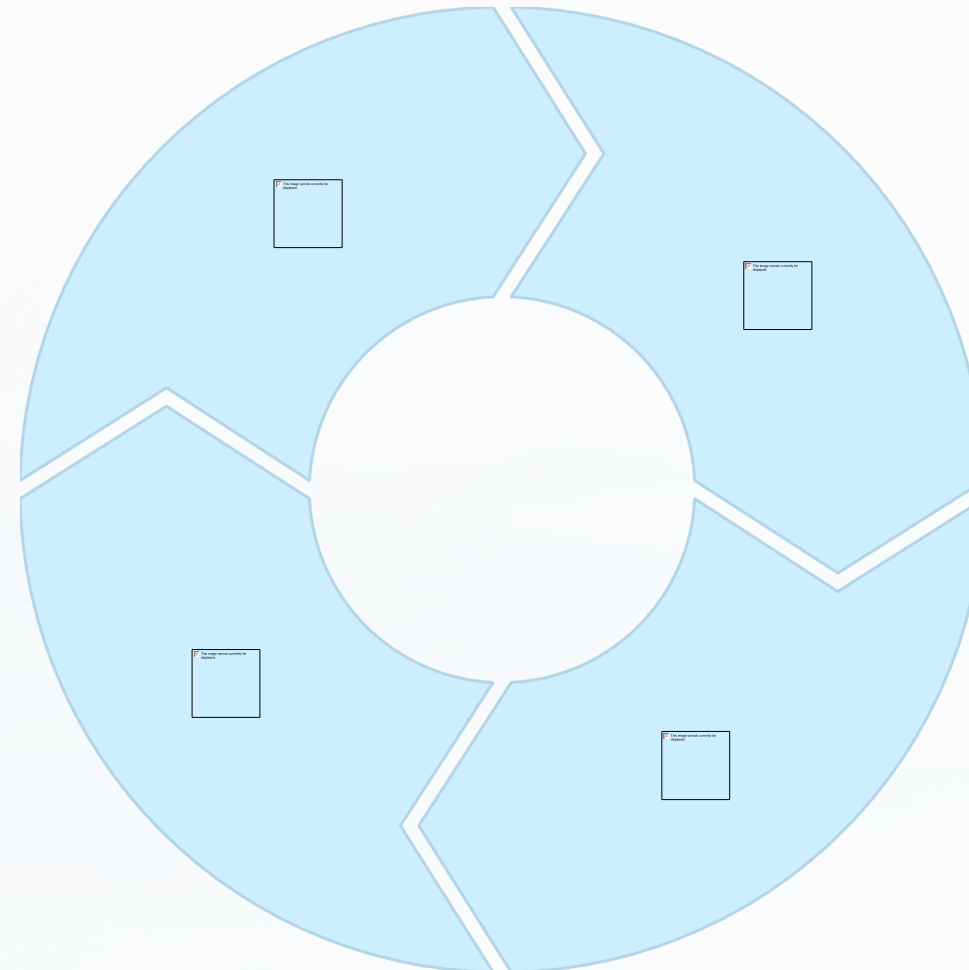
AI-Enabled Population & Patient Management

Risk Stratification

Identifies high-risk patients for early intervention

Evidence Generation

Creates real-world data for continuous improvement



Personalised Pathways

Tailored treatment plans to individual patient needs

Patient Engagement

Delivers customised education and support



Challenges & Responsible AI Adoption

1

Data Privacy & Security

2

Accuracy Validation

3

Clinician Trust

4

Trustworthy Solutions



The Road Ahead: Unlocking Healthcare's Potential

Billions in Savings

AI-driven automation projected to save healthcare systems billions annually

Better Outcomes

Empowering providers to focus on delivering superior patient care

Smarter Healthcare

Embracing innovation for a more efficient, accessible healthcare system

Call to Action

Collaborate across organisations, innovate with purpose, and lead the AI transformation in healthcare



Generative AI in Hospital

Training & SOP

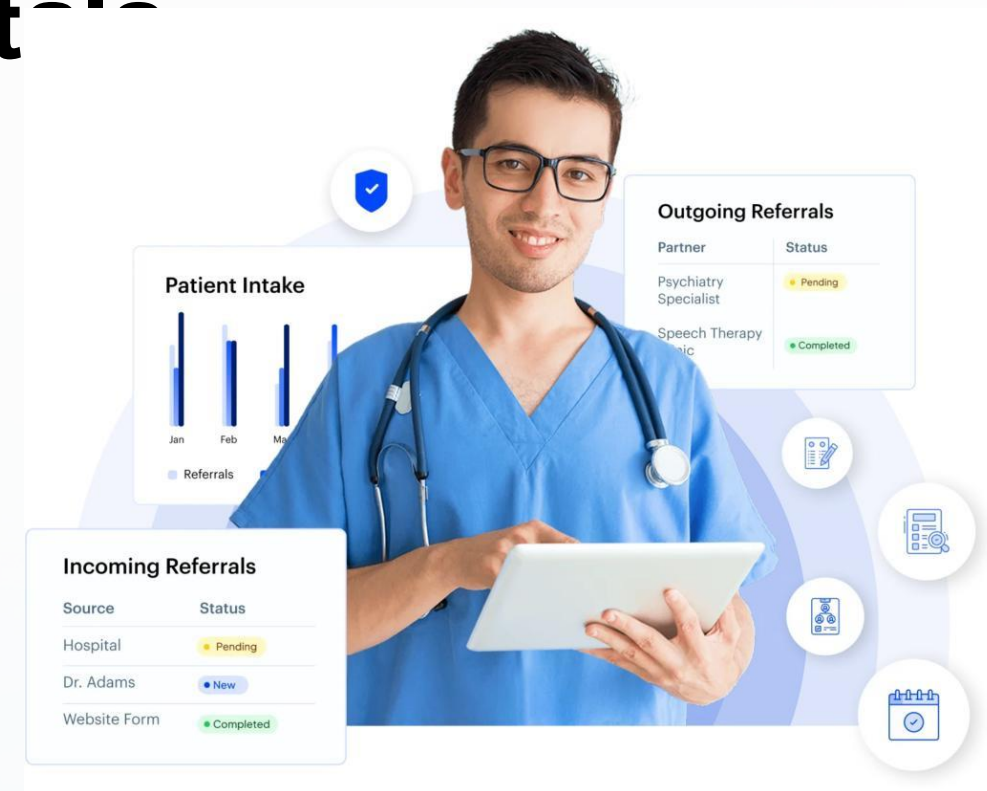
- Creates SOPs instantly
- Generates training material
- Acts as internal knowledge assistant

Smart Patient Communication

- Chatbots for patient queries
- Appointment booking Pre/post-care instructions
- Personalized health reminders

Clinical Documentation

1. Converts doctor conversations → structured notes
2. Auto-generates discharge summaries
3. Creates prescriptions drafts



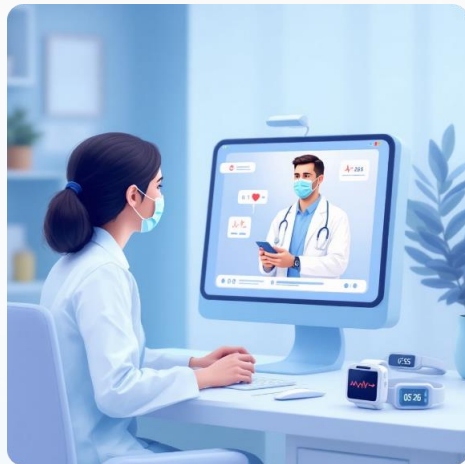
Generative AI in Marketing

- Creates social media content
- Generates ad campaigns
- Personalizes communication
- Writes blogs,
- WhatsApp campaigns



Generative AI is not just automating hospitals...it is helping hospitals think, communicate, and grow better.

Future Trends & Innovations



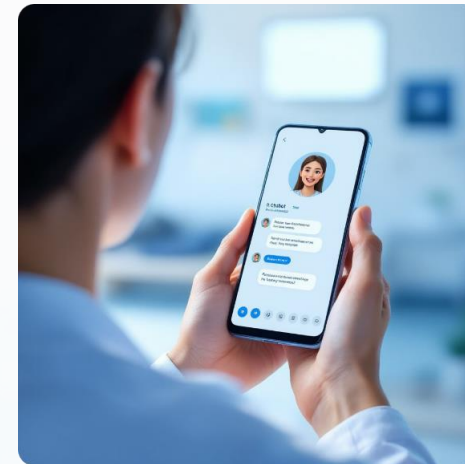
Connected Care

Integration of AI with telehealth, wearables, and IoT devices for continuous monitoring



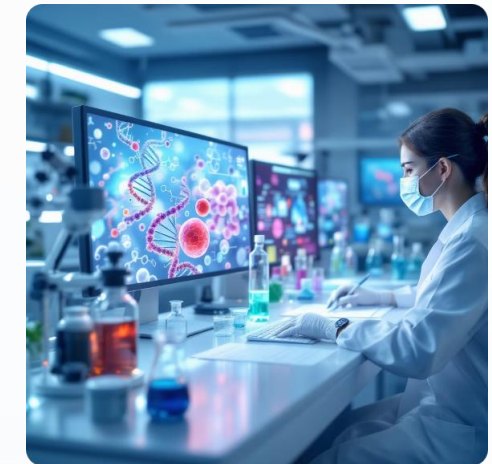
Synthetic Data

Use of artificial patient data for training AI models whilst preserving privacy



Virtual Assistants

AI-powered chatbots and health assistants providing 24/7 patient support



Research Revolution

Growing adoption of AI in clinical research and accelerated drug discovery