



Navigating Today's Healthcare AI: Balancing Innovation with Care

Brittney Brinker

Berry, Dunn, McNeil & Parker, LLC

Pete Lee

Zingtree

Presenters



Brittney Brinker

Revenue Cycle Senior Manager
Berry, Dunn, McNeil & Parker, LLC



Pete Lee

VP of Enterprise Sales
Zingtree



Learning objectives



- ▲ Understand the foundations of AI
- ▲ Identify common revenue cycle challenges addressable by AI
- ▲ Navigating AI standards
- ▲ AI demonstration
- ▲ Case study

Polling question #1





▲ AI 101:

Unlocking the basics

AI 101

Unlocking the basics

1

AI

(Pattern-Based Intelligence)

What it is: A broad term for software that detects patterns or learns from data to make decisions

Example: An AI system analyzes patient X-rays to spot early signs of tumors, flagging them for a doctor's review

2

LLMs

(Advanced AI)

What it is: Specifically trained on huge amounts of text to understand and produce human-like language

Example: Given a multi-page medical report, GPT-4 can summarize it into a concise, patient-friendly overview for quick reading

3

Chatbots

(Conversational Interfaces)

What it is: Interactive tools (usually powered by LLMs) for back-and-forth discussions

Example: A patient types, "I have a fever and cough," and the chatbot asks follow-up questions and suggests next steps

4

AI Agents

(Goal-Driven Autonomy)

What it is: Self-directed AI systems that do more than answer questions—they plan and act to achieve a goal you set

Example: You instruct an AI Agent, "Coordinate all my appointments, send reminders, and manage test results." It books time slots, alerts patients, and updates your calendar automatically—no step-by-step instructions required





▲ Cracking common revenue cycle challenges with AI

Common revenue cycle challenges

- 1 Lack of standardization and centralization in scheduling
- 2 Inconsistent completion of insurance verification
- 3 Time-consuming prior-authorization workflows
- 4 Slow financial advocacy workflows
- 5 Manual and inaccurate coding and billing practices
- 6 Unreliable revenue forecasting



How AI can transform your revenue cycle

01

Lack of standardization and centralization in scheduling

AI can standardize scheduling processes and centralize them in a single platform for seamless coordination and efficiency.

02

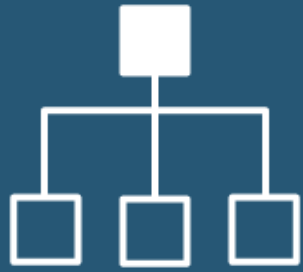
Time-consuming prior-authorization workflows

AI can automate prior-authorization workflows, significantly reducing the time and manual effort involved.



Polling question #2



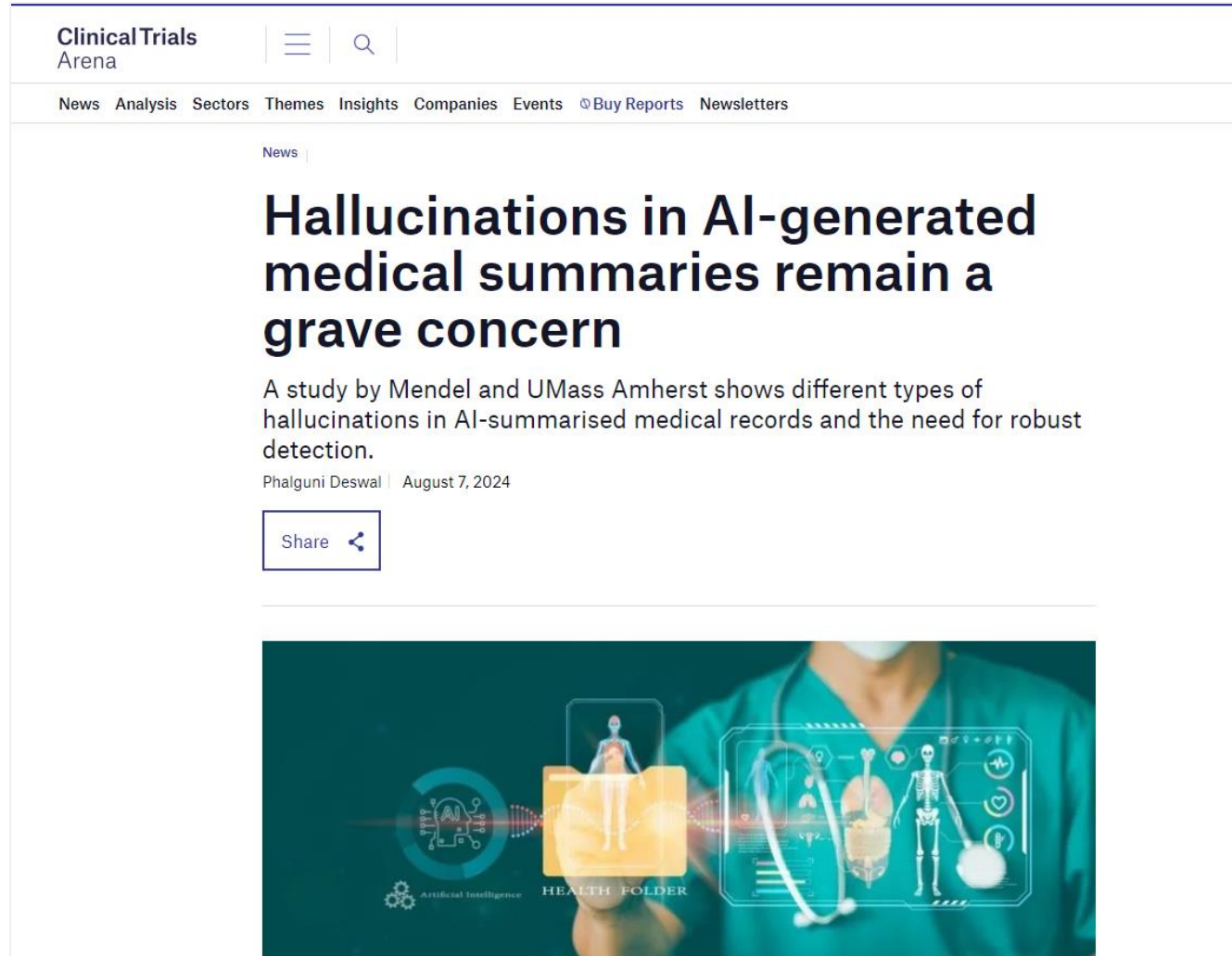


▲ Navigating AI standards

With AI, you can get powerful outcomes

Common AI risks for healthcare executives:

- ▲ Non-compliance and brand policy
- ▲ Hallucinations and dead-ends
- ▲ Inconsistent responses
- ▲ Customer and agent frustration



The screenshot shows a news article on the Clinical Trials Arena website. The article title is "Hallucinations in AI-generated medical summaries remain a grave concern". The sub-headline reads: "A study by Mendel and UMass Amherst shows different types of hallucinations in AI-summarised medical records and the need for robust detection." The author is Phalguni Deswal, and the date is August 7, 2024. Below the text is a "Share" button with a share icon. At the bottom of the article is a graphic illustration featuring a person in teal scrubs holding a glowing yellow folder labeled "HEALTH FOLDER". The background includes a stethoscope, a human skeleton, and various medical icons, with the text "Artificial Intelligence" and "HEALTH FOLDER" overlaid.



Source: research.aimultiple.com

Enterprise-grade security and privacy

Ensuring compliant, secure, and private AI interactions

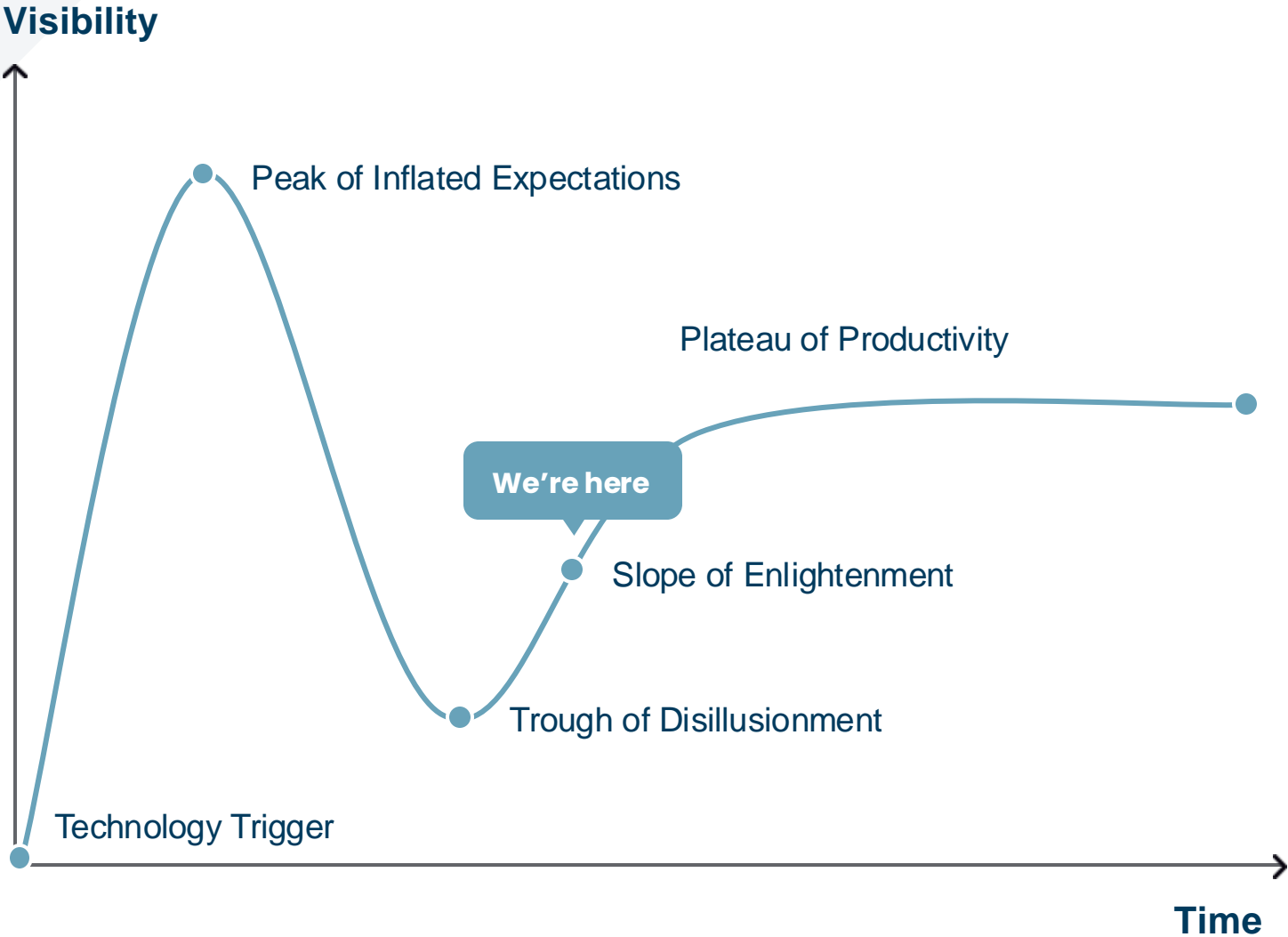
Compliance	Security & Privacy	Guardrails	Governance
<ul style="list-style-type: none">• Use vendors that do not train LLMs on your business data.• Ensure your LLM does not retain or learn from usage.• Never expose PII and PHI to AI.	<ul style="list-style-type: none">• Encryption: AES-256 for data at rest, TLS 1.2+ for data in transit.• Certified for SOC 2 Type II, GDPR, and HIPAA compliance.• Enforce access controls, audits, and continuous monitoring.	<ul style="list-style-type: none">• Connect your workflows to prevent AI hallucinations and dead-ends.• Workflows provide AI with contextual guidance for accurate responses.• Think of workflows as a custom roadmap for navigating complex processes.	<ul style="list-style-type: none">• Maintain human oversight for authoring, publishing, and review.• Include human sign-offs for critical AI actions.• Equip agents with context to bypass AI when necessary.• Ensure workflows are designed to achieve resolution goals effectively.





▲ AI demonstration

Gartner Hype Cycle





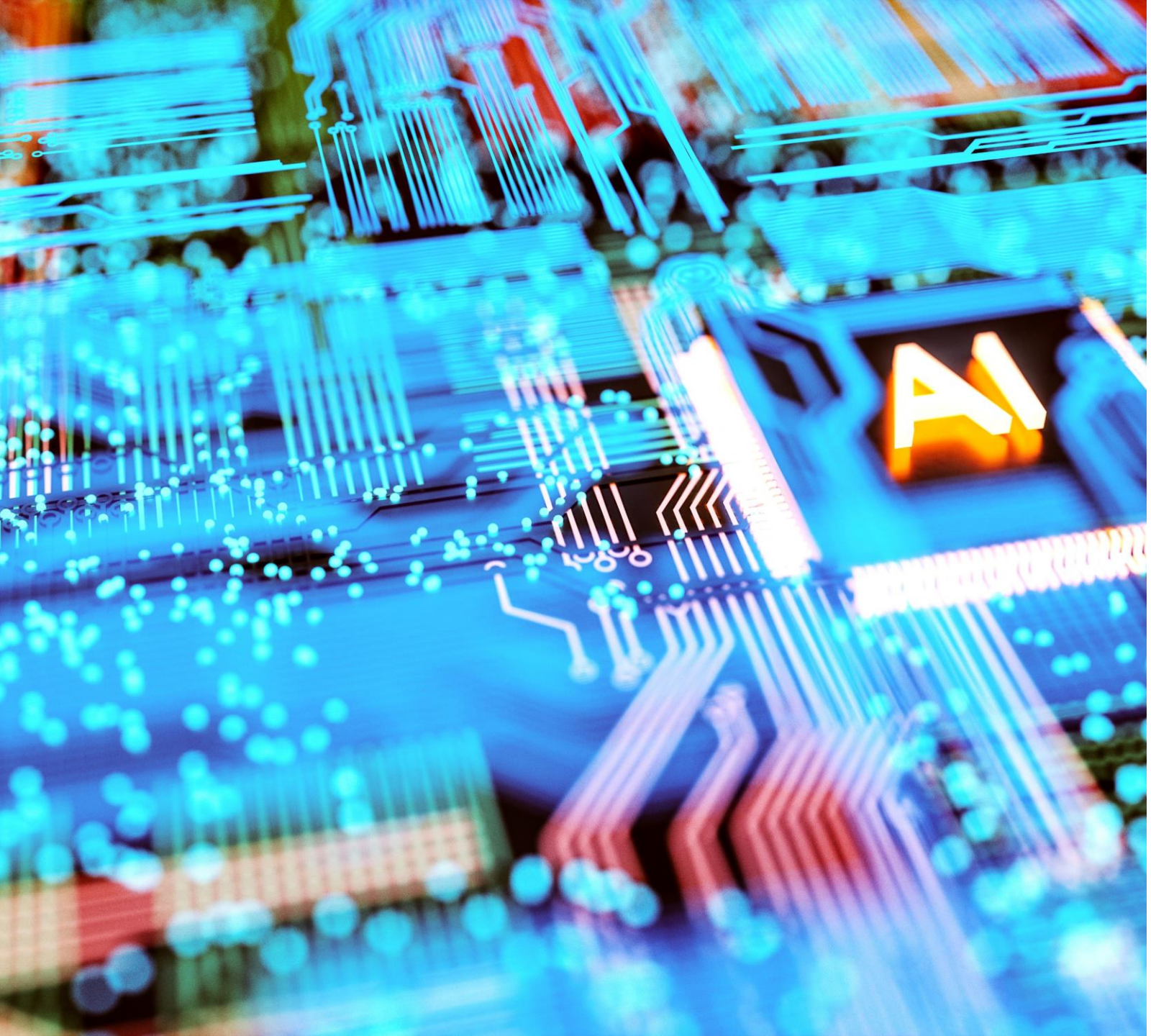
Generic prompt =
Generic response

My stomach hurts. Could you recommend a treatment?

For stomach pain, the best approach depends on the cause, but here are some effective strategies:

1. **Hydrate** – Sipping on clear liquids, like water or herbal tea (ginger or peppermint), can help settle the stomach. Avoid caffeine, alcohol, and sugary drinks.
2. **Rest and Avoid Heavy Foods** – For a few hours, avoid solid foods. If you feel ready to eat, start with bland foods like crackers, bananas, or rice.
3. **Use Over-the-Counter Relief** – Antacids can ease heartburn or indigestion, while something like simethicone may relieve gas discomfort.
4. **Apply Heat** – A warm compress or heating pad on your abdomen can relax muscle spasms and ease pain.
5. **Avoid Trigger Foods** – Steer clear of anything spicy, fatty, fried, or very sugary until the pain subsides.

If the pain persists, is intense, or if you have symptoms like fever, vomiting, or blood in the stool, it's best to check with a healthcare provider to rule out more serious issues.



Context and
situational-aware
prompt =

Accurate response

Patient Information

Enter email address to access the medical database

Next



Confirming Patient Information

Get patient info from the medical database

Account Name	Jay Singh
Phone	(213) 456-7890
Email	jay.singh@zingtree.com
Age	43
Gender	Male
Medical History	Juan, a 43-year-old male, has a medical history of drug allergies to several common medications, including penicillin, sulfonamides, NSAIDs,, codeine, and tetracyclines.
Allergies	Penicillin & Codeine

Next



How Are You Feeling Today?

Specify symptoms to grab more context about the patient



Great >



Unwell >

Select the Area of Your Body Where You Feel Pain

Specify symptoms to grab more context about the patient



Stomach >



Shoulders >



Chest >



Head >



Feet >



Hands >



Heart >



Teeth >

Medical Diagnosis

What are the symptoms you are experiencing?

Is it sudden or gradual?*

Sudden Gradual

Is it constant or does it come and go?*

Constant Comes & Goes

What side is it?*

Right Left Center Everywhere

Get Recommendation



Recommendation

Given your symptoms of gradual, intermittent stomach pain around the belly button on the right side, it's important to consider potential causes such as gas, indigestion, or more serious conditions like appendicitis. Here are some steps you can take:

Medication:

- Gas-X (Simethicone): This can help relieve gas pain and bloating. Dosage is typically 1-2 tablets as needed. It's generally well tolerated and safe.
- Tums (Calcium Carbonate): If you suspect the pain is due to indigestion, Tums can provide quick relief by neutralizing stomach acid. Dosage is 2-4 chewable tablets as needed.

Lifestyle Changes:

- Avoid foods that can cause gas or indigestion, such as beans, carbonated drinks, and spicy foods.
- Eat smaller, more frequent meals to avoid overloading your stomach.

Precautions:

- If the pain persists, intensifies, or is accompanied by other symptoms like fever, nausea, or vomiting, seek medical attention promptly as it could indicate a more serious condition like appendicitis.

Monitor your symptoms closely, and ensure you stay hydrated. If over-the-counter medications do not help or if you're unsure, consult a healthcare professional for further evaluation.

Context:

Jay Singh is a 43 year old male from Maryland feeling unwell. Jay Singh's stomach is hurting; the pain is gradual and it comes and goes around the belly button, located on the Right.

Medical History:

Juan, a 43-year-old male, has a medical history of drug allergies to several common medications, including penicillin, sulfonamides, NSAIDs,, codeine, and tetracyclines.

Allergies:

Penicillin & Codeine

Polling question #3





▲ Case study

Case study 1

Leveraging AI to transition to a centralized model of care

▲ Challenge

- A small healthcare system struggled with disjointed, unstandardized, and antiquated scheduling workflows. Scheduling knowledge was siloed and relied heavily on tribal expertise, creating barriers to consistency and scalability. These scheduling inefficiencies caused confusion among Patient Access Team members, extended wait times for appointments, limited patient access, and fostered a reactive approach to managing the patient journey.

▲ Solution

- We partnered with the healthcare system to design and implement an AI-powered centralized scheduling solution. To address the complexity of healthcare appointments, we are developing decision trees tailored to each patient's reason for visit (RFV), guiding Patient Access Team Members step by step through the scheduling workflow.



Case study 1's decision tree

Level One

- Opening greeting
- Urgent or emergent situations
- Schegistration
- Adult vs. Pediatric
- New vs. Established

Reason for Visits (RFVs)

- Top reason for visits (RFVs)
- Design groupers based on scheduling protocols

Scheduling Decision

- Visit type/appointment type
- Pool of providers or resources
- Standardized scheduling instructions
- Standardized patient Instructions

Additional Items:

- Patient intake surveys
- Patient satisfaction surveys



Questions?



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