

AI 101: Health Care Administration

Artificial intelligence is reshaping health care administration.

As the health care industry works to reduce costs and streamline operations, AI-enabled tools provide solutions for tasks ranging from scheduling and billing to clinical documentation and claims processing. This fact sheet highlights how health systems use AI today in administrative functions.

ADMINISTRATIVE USE CASES



PATIENTS

Customer service chatbots: Answer patient questions and provide 24/7 support through virtual assistants.

Patient-provider matching: Match patients with care based on location, insurance, medical history, or preferences.

Translation services: Provide real-time multilingual interpretation support.

Benefits navigation: Guide patients through their insurance coverage.



PROVIDERS

Scheduling and intake: Automate the collection of patient information before appointments.

Clinical documentation: Transcribe patient-provider conversations into structured clinical notes and update electronic health records.

Patient communication: Generate discharge summaries, referral letters, and follow-up instruction.

Billing support systems: Suggest billing codes based on clinical notes and diagnoses.



PAYERS

Prior authorization tools: Use past data and clinical guidelines to predict whether a request will meet insurance coverage requirements.

Claims processing: Automate the review of submitted claims, flag missing information, and verify consistency with policy requirements.

Fraud detection: Analyze billing data to detect upcoding and other anomalies that may indicate fraud.

Digitizing paper files: Convert old records into digital formats for use in billing and record keeping systems.



HEALTH SYSTEMS

Revenue cycle management: Integrate data from hospital IT systems to improve forecasting, discharge planning, and billing accuracy.

Resource forecasting: Analyze patient flow data to predict bed availability and staffing needs.

Supply chain management: Track inventory levels and forecast medical supply needs.

Patient monitoring: Monitor room activity and alert staff to patient needs in real time.

AI TECHNOLOGY BEHIND THE USE CASES

- **Natural language processing (NLP):** A branch of AI that helps computers understand, process, and respond to human language. It enables tools such as translation services.
- **Generative AI (GenAI):** A subfield of AI that enables computers to create new content—such as text, images, and audio—based on pre-trained data. Common applications include chatbots.
- **Large language models (LLMs):** Advanced NLP and GenAI systems trained on large volumes of data to summarize, translate, predict, and generate contextual conversations. They power tools such as AI scribes.
- **Predictive analytics:** Models that analyze historical data to forecast future outcomes or needs, such as anticipating supply chain management and hospital staffing levels.
- **Optical character recognition (OCR):** Technology that converts physical documents into computer-readable formats, helping digitize medical records and automate claims processing.

Note: LLMs may occasionally generate confident but incorrect or misleading information—a known issue called “hallucinations.”

EMERGING TRENDS IN AI-ENABLED HEALTH CARE TOOLS

Ambient AI scribes are on track to become one of the [fastest technology adoptions](#) in health care history. The technology is quickly evolving beyond clinical documentation. Developers are building more advanced tools, and the next generation of health care AI may become general-purpose administrative platforms—AI assistants and agents that support a broad range of financial, operational, and clinical workflows across the system.

AMBIENT SCRIBES

Passive technology that listens, transcribes, and generates clinical notes during appointments.

- **Autonomy:** Low to moderate
- **Scope of use:** Narrow
- **Human Involvement:** Required — clinicians must review and approve.



AI ASSISTANTS

Reactive tools that respond to user prompts with relevant action and useful information.

- **Autonomy:** Moderate
- **Scope of use:** Broad
- **Human Involvement:** Required — users must initiate interaction.

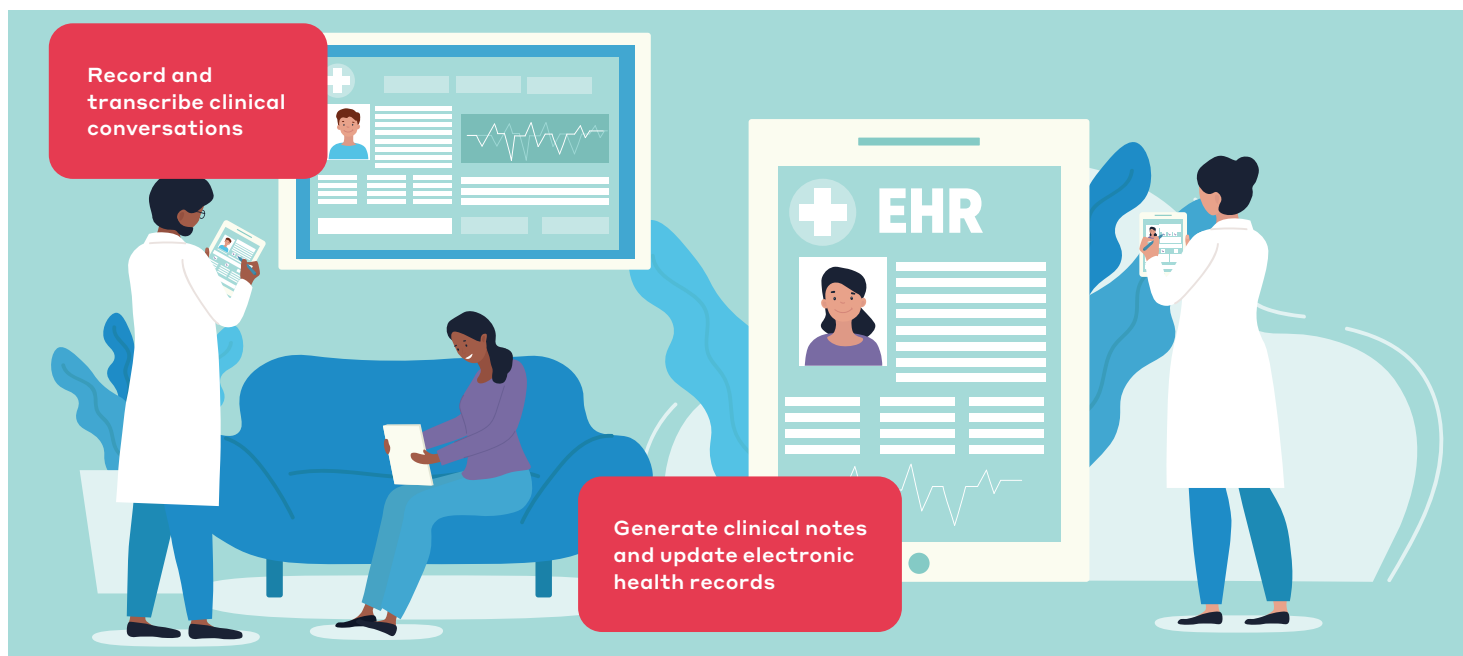


AI AGENTS

Autonomous systems that execute multi-step actions to complete pre-defined user goals.

- **Autonomy:** High
- **Scope of use:** Broad-Complex
- **Human Involvement:** Limited — minimal user input or oversight.

USING AMBIENT SCRIBES



ASK US!

Curious about AI in health care? BPC helps policymakers understand where AI is used, how it performs, and how to craft smart, bipartisan policies that protect patients and improve health outcomes.

For more information, contact Geoff Lane at: glane@bipartisanpolicy.org.



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