Use of GPT-Based Tools in Medical School: Utility, Perceptions, and Practice Patterns

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Background & Objectives

Generative AI tools such as ChatGPT are rapidly entering medical education. Prior surveys suggest modest adoption among trainees, yet real-world use among medical students remains poorly characterized. Understanding these patterns is essential, as they preview the AI environment residency programs will inherit.

Objectives: Characterize how medical students use GPT-based tools for study, board preparation, and clinical learning.
Identify perceived benefits, concerns, and readiness for curricular integration.

Methods

Cross-sectional anonymous survey of medical students rotating at a tertiary academic institution (April–September 2025).
The 20-item instrument assessed demographics, GPT usage frequency and purpose, perceived educational utility (Likert 1–5), and concerns.
Quantitative data were analyzed descriptively in Excel and Python.
No identifiable information was collected.

Table 1. Demographic Characteristics of Medical Student Respondents (n = 174)

Characteristic	Category	n (%)
Sex	Male	90 (52%)
	Female	84 (48%)
Age (years)	Median (range)	25 (21–33)
Year in medical school	M1	38 (22%)
	M2	41 (24%)
	M3	55 (32%)
	M4	36 (21%)
	MD/PhD	4 (2%)
Prior AI exposure	None	27 (16%)
	Limited (basic familiarity)	89 (51%)
	Moderate (course or project)	44 (25%)
	Extensive (formal AI training / research)	14 (8%)
Most common medical schools represented	FSU, UCF, UF, USF, Nova	–

Figure 1. Frequency of GPT Tool Use Among Medical Students (n = 17

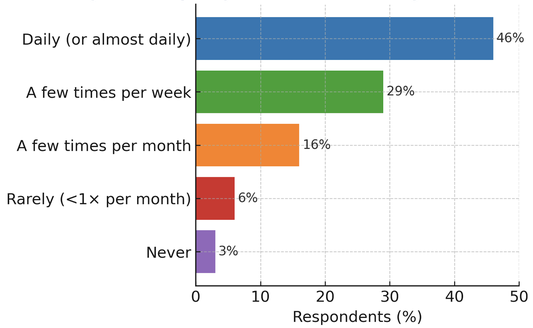

Figure 2. Most Used GPT Platforms Among Medical Students (n = 174)

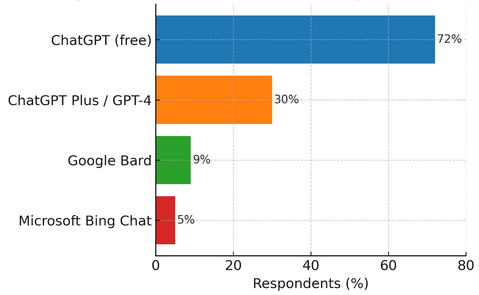

Figure 3. Common Applications of GPT Tools Among Medical Students (n = 174)

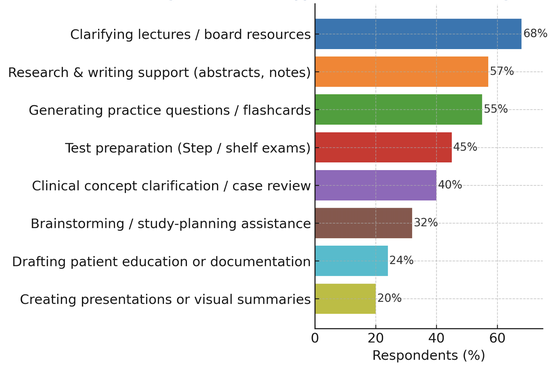

Figure 4. Perceived Usefulness of GPT Tools Among Medical Students (n = 174)

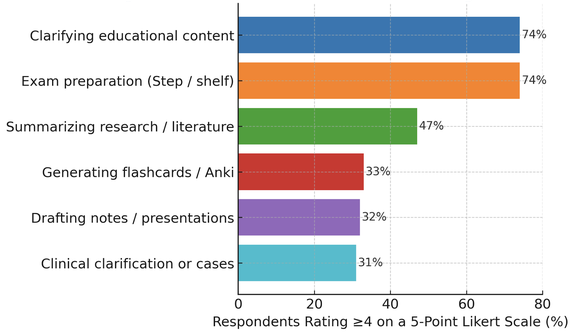

Figure 5. Awareness of Medical School AI or Chatbot Policy (n = 174)

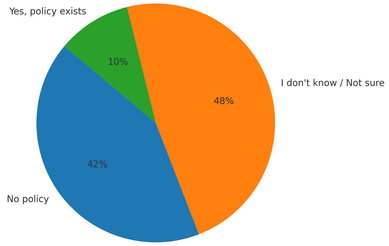

Figure 6. Desired Future Features or Applications of GPT Tools in Medical Education (n = 174)

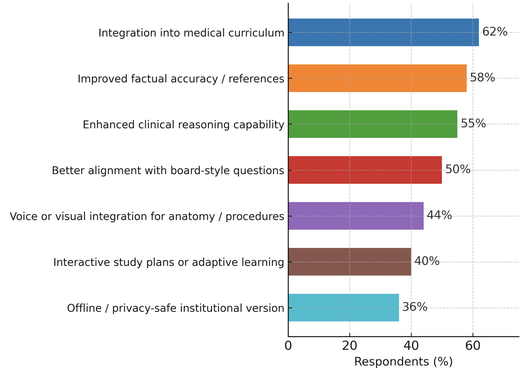

Table 2. Patterns of GPT Use and Applications Among Medical Students (n = 174)

Category	n (%)
Frequency of GPT Use	
Daily (or almost daily)	80 (46%)
A few times per week	50 (29%)
A few times per month	28 (16%)
Rarely (<1× per month)	10 (6%)
Never	6 (3%)
Most Used Platforms	
ChatGPT (free)	125 (72%)
ChatGPT Plus / GPT-4	52 (30%)
Google Bard	16 (9%)
Microsoft Bing Chat	9 (5%)
Common Applications	
Clarifying lectures / board resources	118 (68%)
Research & writing support (abstracts, notes)	99 (57%)
Generating practice questions / flashcards	96 (55%)
Test preparation (Step / shelf exams)	79 (45%)
Clinical concept clarification / case review	70 (40%)
Brainstorming / study-planning assistance	56 (32%)
Drafting patient education or documentation	42 (24%)
Creating presentations or visual summaries	35 (20%)

Conclusions

Medical students reported high adoption of GPT-based tools, with most using them weekly or daily for studying, summarizing lectures, and board preparation.

While accessibility and perceived efficiency were valued, concerns centered on inaccuracy, over-reliance, and academic integrity.

Students rely heavily on GPT informally yet hesitate to endorse formal curricular integration, underscoring a gap between practice and policy.

Incoming residents will arrive already accustomed to GPT use, emphasizing the need for structured AI literacy training that promotes accuracy, professionalism, and safe application in clinical education.

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