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The Early Impacts of Generative AI on Academic Biomedical Research

Agenda

- Introduction
  - Background of the study
  - Methodology
  - Key findings
- Detailed findings
  - Attitudes towards GenAI
  - Adoption of GenAI
  - Support needs
  - Looking ahead

We help academic and cultural communities know what is coming next, learn from rigorous and well-designed research studies, and adapt to new realities and opportunities.

Landscape Research on GenAI in Higher Ed

Making AI Generative for Higher Education

19 U.S. and Canadian Universities

International Survey of AI Adoption in Biomedical Research

246 faculty interviews

2459 researchers respondents

Generative AI and Postsecondary Instructional Practices

2654 instructors responded

Generative AI and Scholarly Publishing

12 interviews with publishers

Generative AI Product Tracker

Regularly updated, curated guide to GenAI tools designed for postsecondary faculty and students

Generative AI Licensing Tracker

Up-to-date information about licensing of scholarly content for use by GenAI

Launching in 2025

National Survey of Research and Information Practices

Libraries and AI Literacy Cohort

Adoption of GenAI by Biomedical Researchers: Project Overview

How are biomedical researchers using generative AI in their research?

February 20-March 29, 2024

770 biomedical researchers responded

1689 researchers in other disciplines responded

3% Margin of error

Chan Zuckerberg Initiative

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https://sr.ithaka.org/publications/adoption-of-generative-ai-by-academic-biomedical-researchers

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The Big Picture

Biomedical researchers are open to using GenAI in their research, and are experimenting with doing so. Few are regular users.

Key factors limiting adoption are concerns about the accuracy of GenAI, and uncertainty about how to use it ethically and productively.

6 in 10 biomedical researchers have ever used Gen AI in their research.

4 in 10 biomedical researchers currently use Gen AI in their research.

Fewer than **1 in 10** biomedical researchers regularly use Gen AI in their research.

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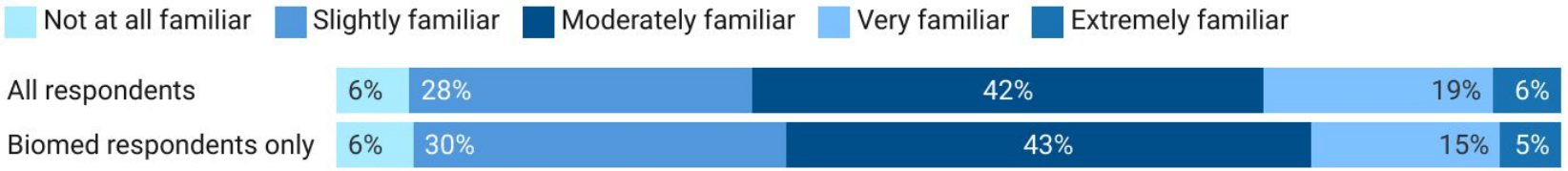
Attitudes

In general, how familiar are you with generative ai?



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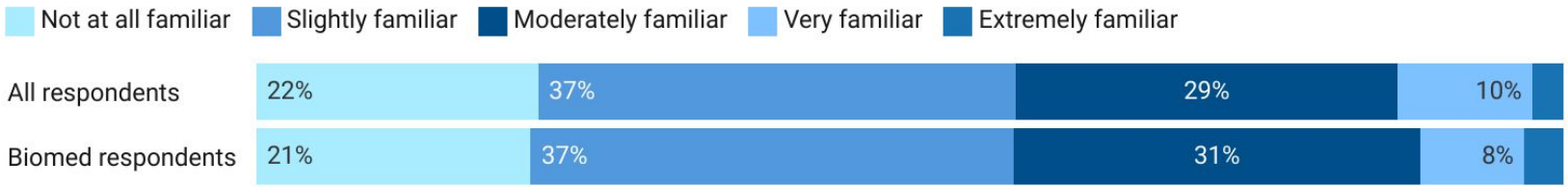
In general, how familiar are you with how generative ai can be applied in research settings?



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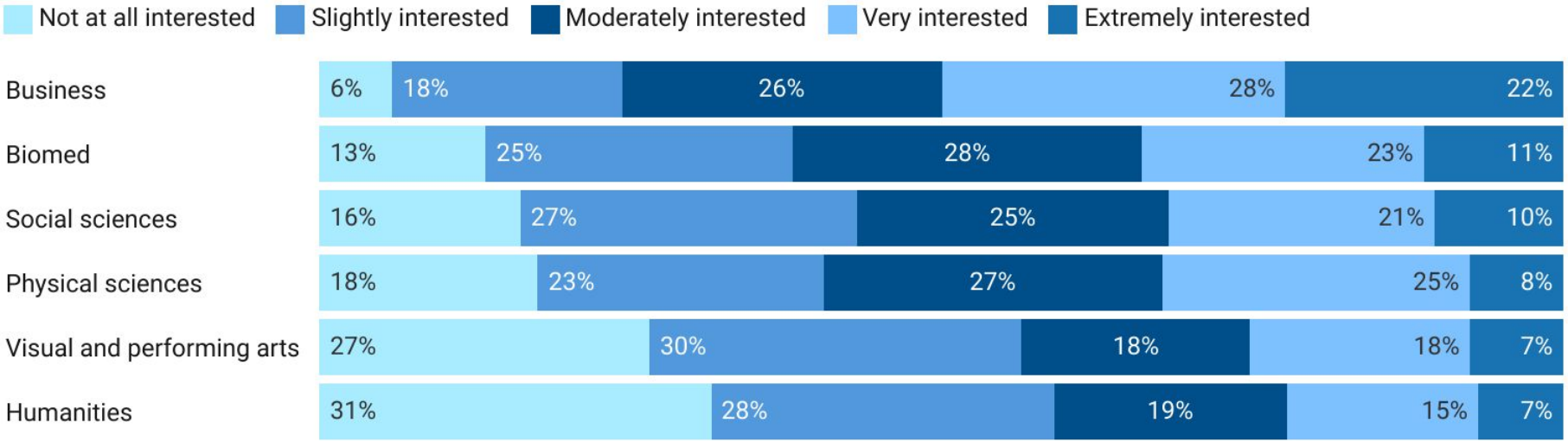
How interested are you in using generative ai in your own research?



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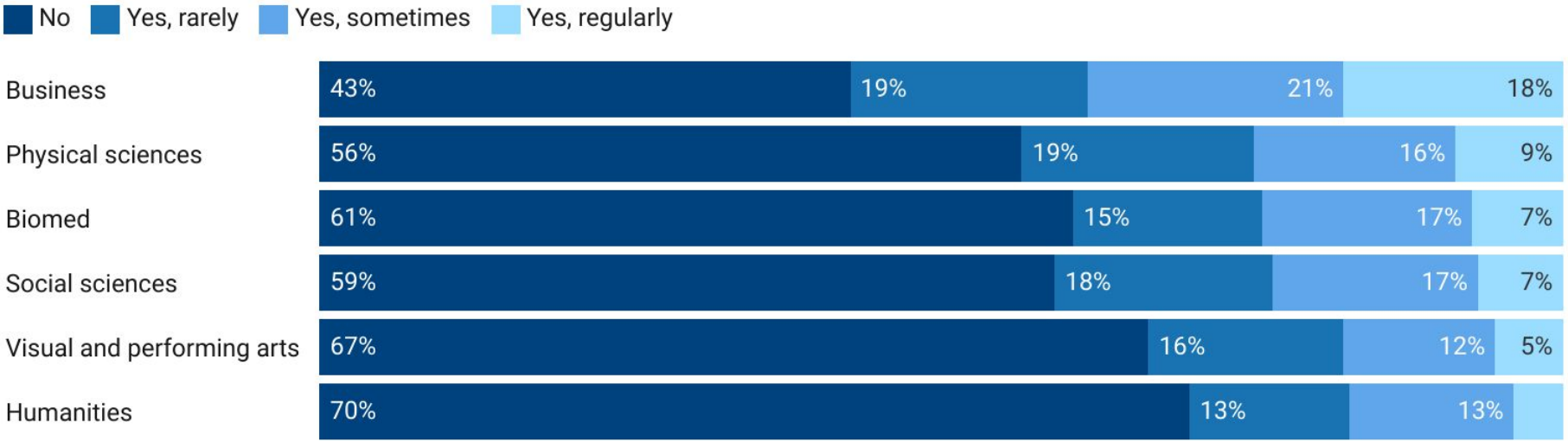
Adoption

Do you use generative ai in your own research?



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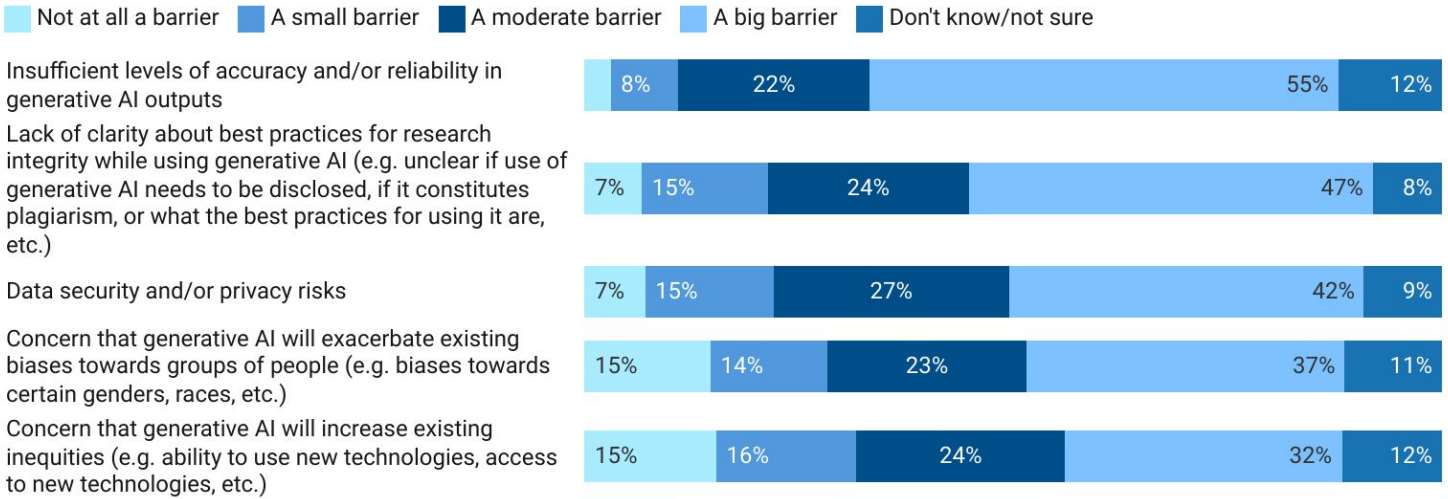
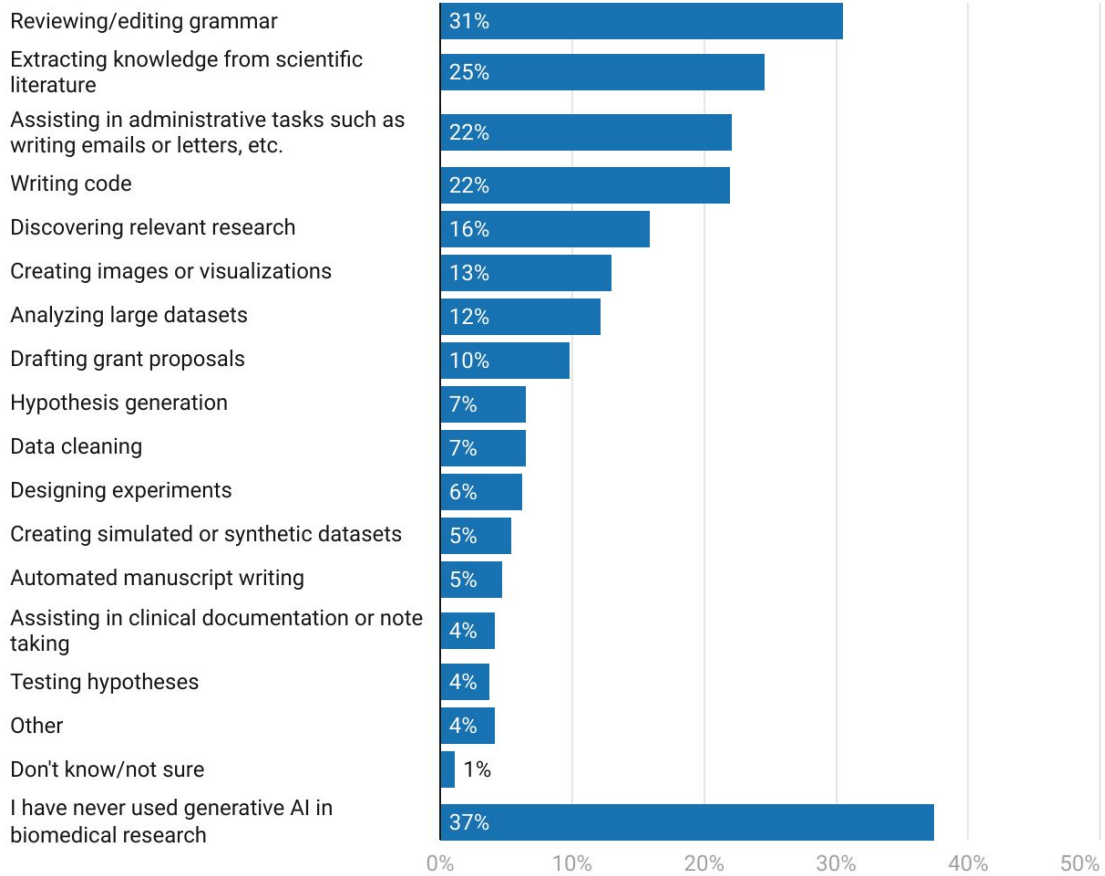
For you personally, to what extent are the following barriers to incorporating generative ai into your own research? (Biomed respondents only)



In which of the following ways have you yourself used generative ai in your biomedical research?



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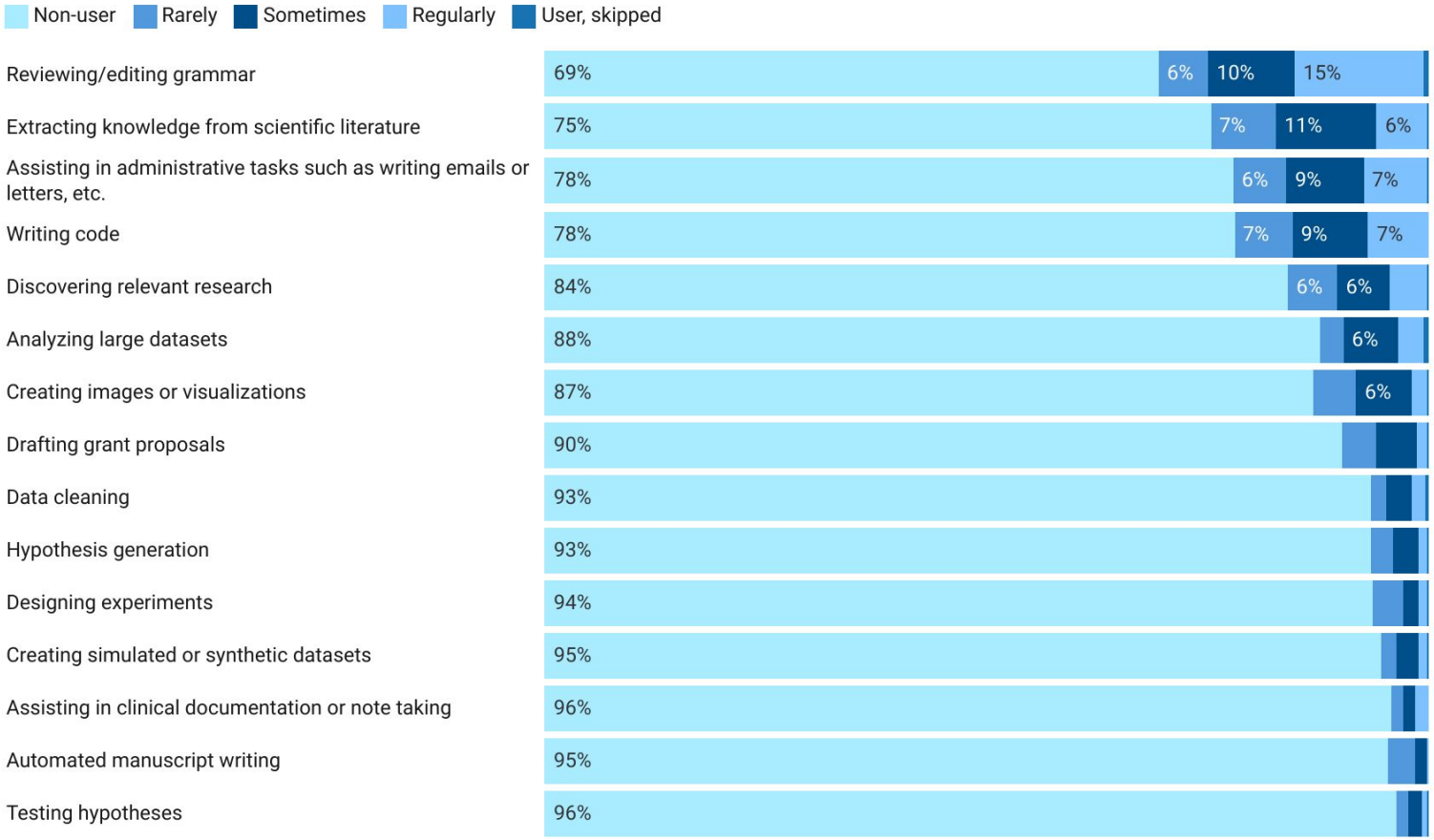
How frequently do you use generative ai on the following tasks? (Biomed respondents only)



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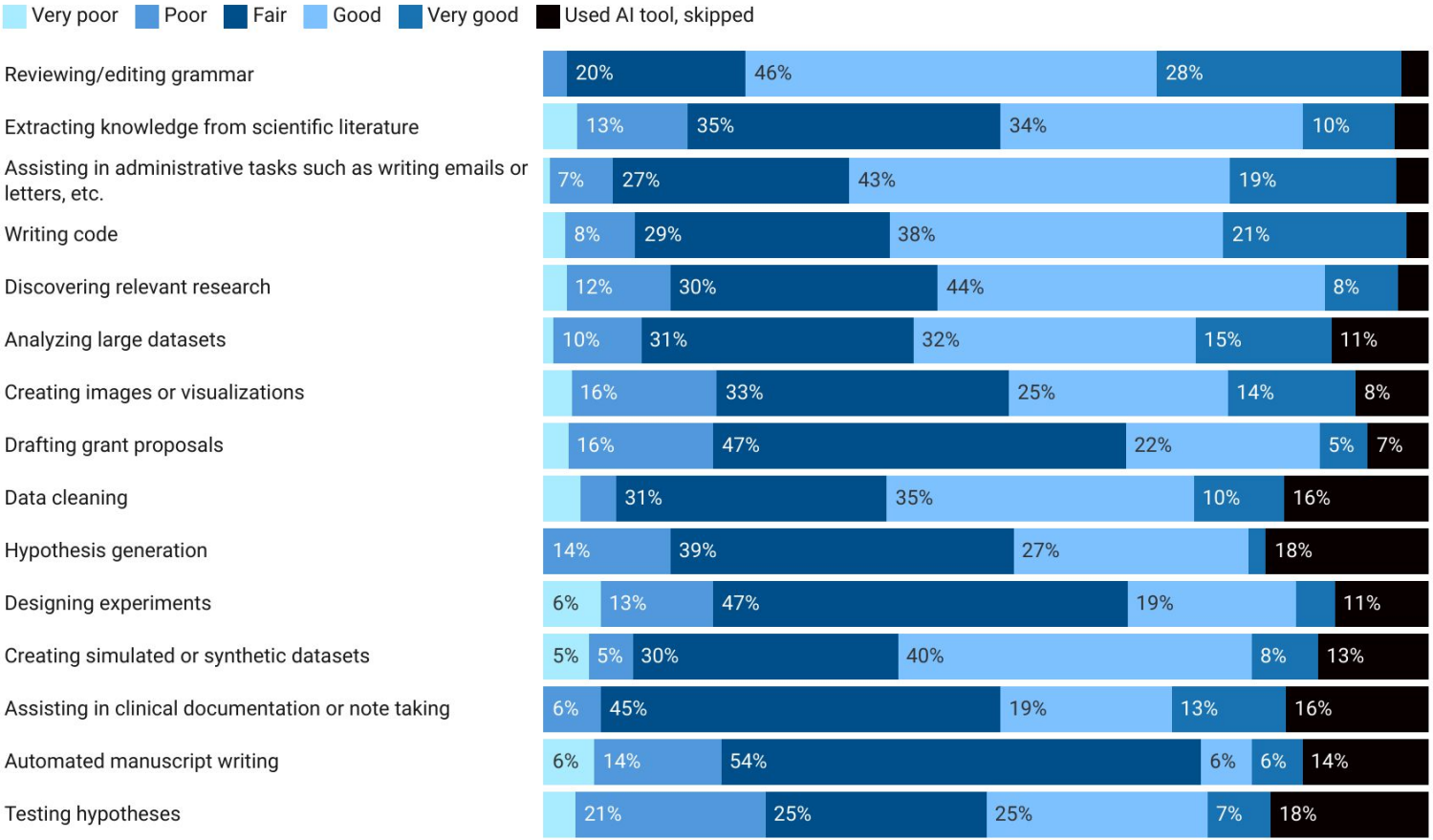
When you use generative ai on the following biomedical research task(s), what was the quality of the work that the generative ai produced? (Biomed respondents only)



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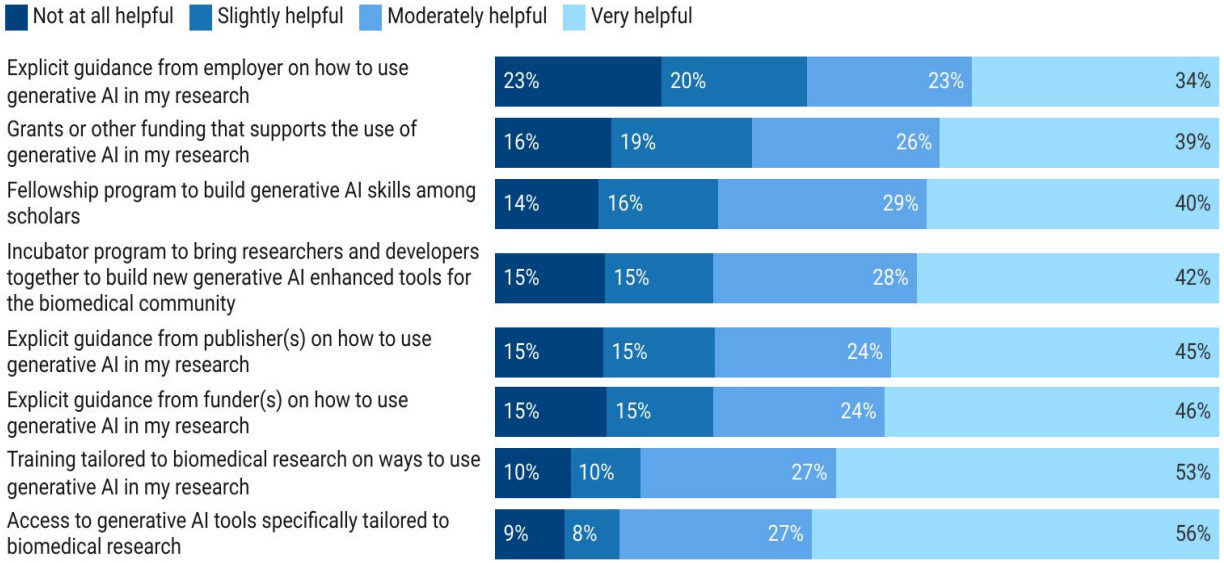
Support Needs

To what extent would the following supports and/or resources be helpful in incorporating generative ai into your biomedical research?



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Looking Ahead

The Big Picture Redux

Despite the sense that generative AI is a runaway train, there is still time for deliberation, consensus building, and coordinated action by stakeholders to mitigate ethical challenges and maximize its contributions to science.

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Thank you

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