



AN EXPLORATORY SURVEY ON AI USE AND ATTITUDES

OCTOBER 2026

THE AI-NATIVE RESIDENT

How Spain's newest doctors are using artificial
intelligence

Published by We Are Innovation, October 2026.

Suggested citation: We Are Innovation (2026). The AI-Native Resident: How Spain's newest doctors are using artificial intelligence. An exploratory survey on AI use and attitudes. We Are Innovation, October 2026.

<https://weareinnovation.global/>

© 2026 We Are Innovation

CONTENTS

Preface	4
Introduction	5
Executive summary	7
Methodological statement	8
Results	9
1. Who took part	9
2. AI in residents' daily practice	10
3. Training and skills	12
4. Access, safeguards and governance	13
5. Benefits, concerns and barriers	14
6. Policy and the future	16
Implications: what these findings suggest	19
About We Are Innovation	21

PREFACE

Artificial intelligence has brought about a revolution comparable to that of the Internet in the last century.

Its use has expanded exponentially across professions and disciplines, in both academic and professional settings.

In healthcare, its use raises a series of challenges we must confront: patient privacy; the responsibilities and competencies AI might eventually assume in relation to physicians; the efficiency and effectiveness it could bring to healthcare systems; and the potential liabilities arising from its misuse.

These discussions must take place, and our generation of young physicians must lead. We cannot ignore a technology with great potential to revolutionize healthcare, nor allow regulators and politicians to lead the debate since physicians bear ultimate responsibility for their patients.

This is where this survey matters: understanding the real opinions and uses of AI among the new generation of physicians, beyond grandiose statements by public and academic representatives.

It is clear that without incorporating artificial intelligence into university curricula and proper training, the competence gap between physicians who use AI and those who do not could become enormous. This could create a generation divided between first-class physicians who use AI effectively and second-class physicians who use it inappropriately, risking their patients and professional credibility.

Bernardino Azarías Ferrer Lozano, MD

Health Futures Fellow at We Are Innovation
Murcia, Spain · October 17, 2026

INTRODUCTION

Artificial intelligence is often described as the future of medicine. This study suggests that, for a new generation of doctors, it is already the present.

Since 2019, We Are Innovation has brought together a global network of more than 60 think tanks, foundations and civil society organizations in over 30 countries, united by a simple conviction: innovation is one of the most powerful forces for improving people's lives. Health has become a central area of our work. Whether the subject is public health policy, access to new medical technologies, the resilience of the medical isotope supply that nuclear medicine depends on for diagnosis and cancer treatment, or the governance of artificial intelligence, we keep returning to the same question: do our rules help people benefit from innovation or stand in the way? We try to answer it with evidence, open dialogue with policymakers, and by listening to those who live with the consequences of regulatory decisions: patients, consumers and the professionals who care for them.

This exploratory survey listens to one such group: medical residents in Spain. It is a small, focused study of 30 doctors, not a representative national sample. But it offers a revealing window into how the newest members of the medical profession are actually using AI, and what they need from the institutions around them.

What stands out first is how ordinary AI has already become in their daily work. Close to nine in ten respondents use AI tools at least several times a week, and one in three every day. This goes well beyond studying or preparing presentations. Almost all of them, 97%, have turned to AI to support decisions about real patients, most often when working through a differential diagnosis or checking treatment options. They have done so largely on their own: self-taught, through free personal accounts, and without hospital guidelines to rely on. Adoption, in other words, is happening from the bottom up, driven by young doctors' own initiative, while institutions are still catching up. This is encouraging, because these residents clearly find value in the tools: 97% say AI saves them time. But it is also a call to action. Adoption on this scale cannot depend indefinitely on individual judgment alone.

Second, what stands out is what residents are asking for in return. They are not asking for AI to be held back, nor for it to be left entirely unattended. 83% believe health authorities should actively promote or facilitate its use, and the same share say they would use it more if they had adequate tools, training and clear guidelines. Nearly two-thirds worry that excessive regulation could limit access to useful tools, and the same proportion fear that Europe is falling behind. This concern is not abstract: some clinical AI tools already available to doctors in other parts of the world cannot be used in the European Union. In our view, the message from these residents is clear. They want an enabling framework built on training within the MIR program, institutional access to reliable tools, and practical guidance. Restrictions that leave doctors relying on whatever they can find on their own would not give them that.

I want to thank the residents who generously gave their time to answer our questionnaire, and Bernardino Azarías Ferrer Lozano for his preface and his commitment to this project. We hope this study opens a long-overdue conversation, and that it lays the groundwork for broader research on how Europe's doctors can make the most of artificial intelligence, for their own sake and, above all, for their patients'.

Federico N. Fernández

CEO, We Are Innovation

EXECUTIVE SUMMARY

1**AI is already part of residents' daily work**

87% of residents use AI tools at least several times a week, and 33% use them daily or more. Use goes beyond study: 97% have turned to AI to support decisions about real patients, mainly for differential diagnosis and treatment queries.

2**A self-taught generation: medical training has not caught up**

90% learned to use AI on their own, and only 7% have received any formal training. 93% believe the MIR program prepares residents "little" or "not at all," while 90% report high or very high interest in clinical AI training.

3**Residents bring their own AI, with no institutional framework**

80% rely on a free personal account for their main tool, and none reports institutional access. Not a single respondent is aware of a hospital policy on clinical AI: 60% don't know whether one exists, and 40% say there is none.

4**Clear benefits, realistic expectations and awareness of risks**

97% say AI saves them time, and 60% estimate savings of at least one hour per week. Yet 97% also worry about errors or "hallucinations," and verification habits are uneven: only 33% regularly check AI output against independent sources. This reinforces the need for training and guidance.

5**Residents want policymakers to enable AI adoption, not hold it back**

83% believe health authorities should actively promote or facilitate the use of AI. The same share would use it more with adequate tools, training and clear guidelines. 63% worry that excessive regulation could limit access to useful tools, and the same share fear Europe falling behind.

METHODOLOGICAL STATEMENT

This exploratory survey on AI use and attitudes was conducted by We Are Innovation among 30 medical residents (MIR) in Spain between 18 September and 15 October 2026. Respondents were recruited through residents' peer networks via personal messaging (WhatsApp, SMS) and completed an anonymous, password-protected online questionnaire. The sample is non-probabilistic and self-selected; results describe the views and practices of the participants and should not be extrapolated to the broader population of residents or physicians in Spain.

SAMPLE DESCRIPTION

Medical residents (MIR) training in Spain, across 14 specialties.

SAMPLE SIZE

30 respondents (16 women, 14 men).

DATA COLLECTION METHOD

Anonymous, password-protected online questionnaire.

FIELDWORK PERIOD

18 September – 15 October 2026.

Percentages are rounded to whole numbers and may not total 100%. For multiple-answer questions, totals exceed 100%.

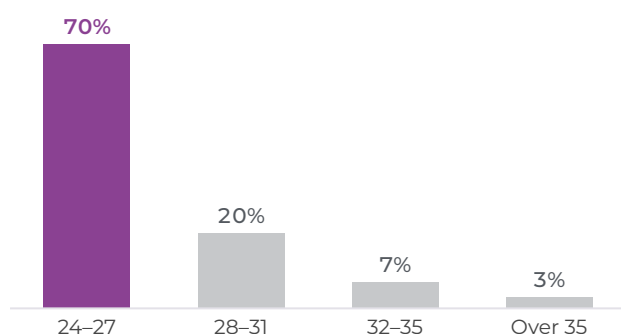
RESULTS

1 Who took part

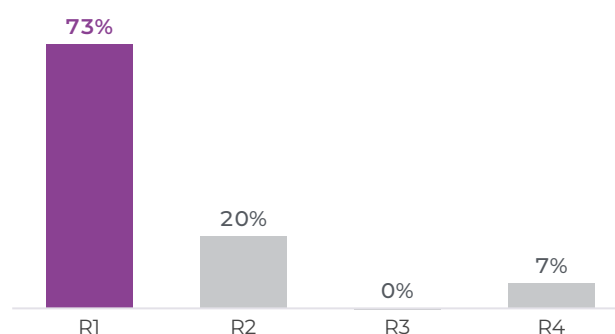
A SNAPSHOT OF SPAIN'S NEWEST DOCTORS

73% of respondents are first-year residents (R1) and 70% are aged 24–27. Anesthesiology (27%) and family medicine (20%) are the most represented specialties.

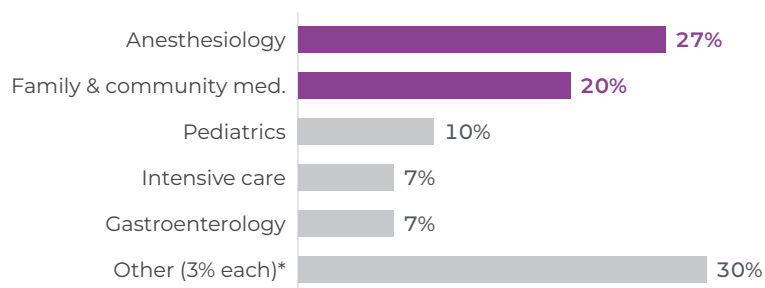
Age



Year of residency



Specialty



53% women · 47% men

47% take part in research (40% occasionally, 7% regularly)

*Emergency medicine, internal medicine, obstetrics & gynecology, cardiology, oncology, urology, clinical neurophysiology, pulmonology, ENT.

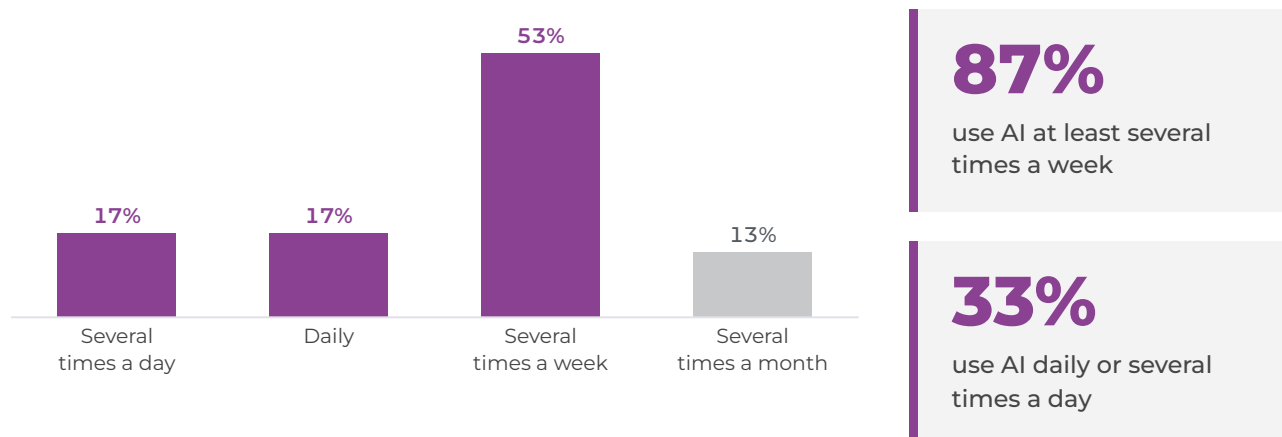
Profile questions: age, year of residency, specialty, sex and research activity. Base: 30 medical residents.

2 AI in residents' daily practice

AI IS ALREADY A ROUTINE TOOL FOR RESIDENTS

87% use AI tools at least several times a week, and 33% use them every day or several times a day.

Frequency of AI use (% of respondents)

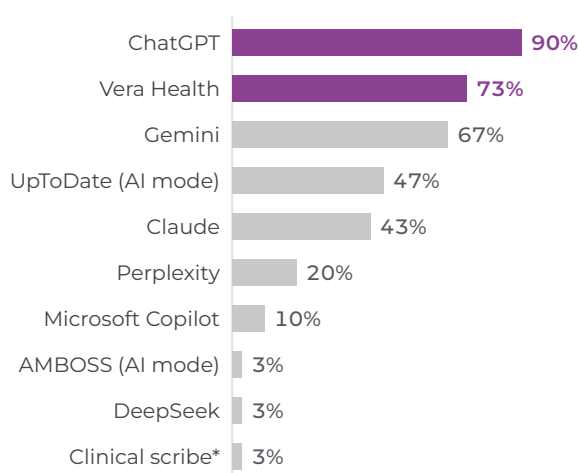


Q: How often do you use artificial intelligence tools (of any kind) in your work as a resident: clinical, academic or research?
Base: 30 medical residents.

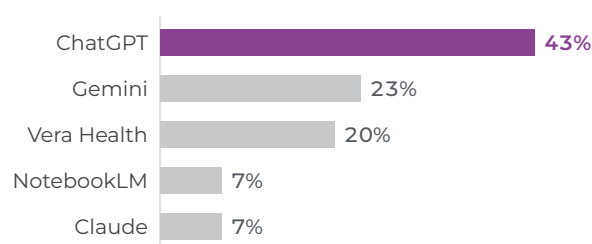
GENERAL-PURPOSE CHATBOTS AND CLINICAL AI SEARCH TOOLS LEAD THE WAY

ChatGPT (90%) and Vera Health (73%) are the most widely used tools. ChatGPT is also the tool used most often, by 43%.

Tools used in the last six months



Tool used most often



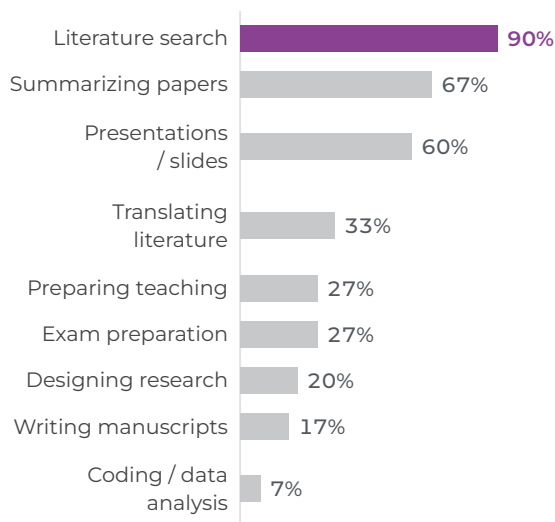
*Clinical documentation assistant (e.g. Nabla, Tandem, Dragon Copilot/DAX). No respondent reported diagnostic AI integrated into their service.

Q: Which AI tools have you used in the last six months? (multiple answers) · Of those tools, which one do you use most often? (single answer) Base: 30 medical residents.

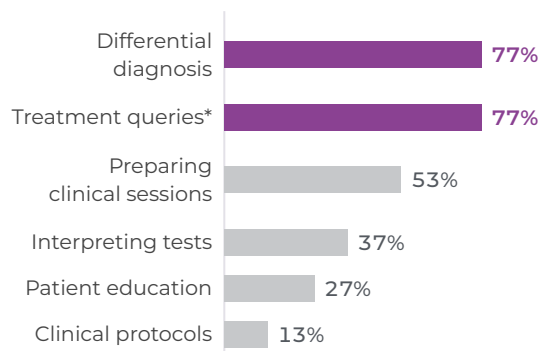
AI SUPPORTS BOTH STUDY AND CLINICAL WORK

Literature search (90%) leads academic uses; differential diagnosis and treatment queries (77% each) lead clinical uses. Administrative uses are marginal (20%).

Academic, research and training



Clinical



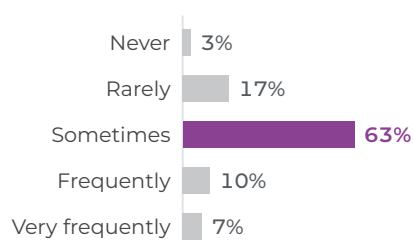
*Doses, interactions and treatment options.

Q: What do you use AI tools for? (multiple answers, by area) Base: 30 medical residents.

MOST RESIDENTS HAVE USED AI TO SUPPORT DECISIONS ON REAL PATIENTS

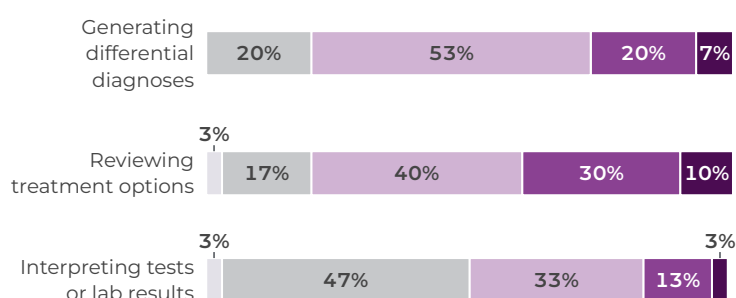
97% have done so at least rarely, mostly “sometimes.” Reviewing treatment options is where AI is used most often (40% frequently or very frequently).

Use of AI to support clinical decisions



By task

Legend: Never (lightest), Rarely, Sometimes, Frequently, Very frequently (darkest)



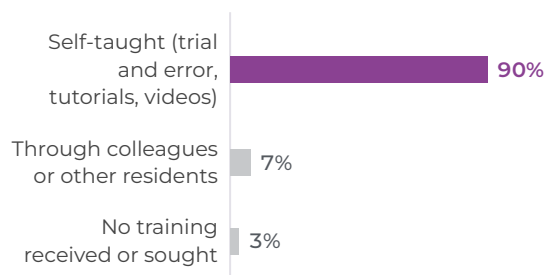
Q: How often do you use AI to support clinical decisions with real patients? · How often do you use AI for each of the following tasks with real patients? Base: 30 medical residents.

3 Training and skills

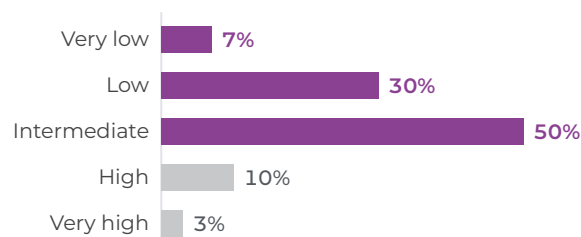
A SELF-TAUGHT GENERATION

90% learned to use AI on their own, and only 7% have received formal training (online courses). Most rate their knowledge of medical AI as intermediate or lower.

Main way of learning to use AI



Self-rated knowledge of AI in medicine



7%

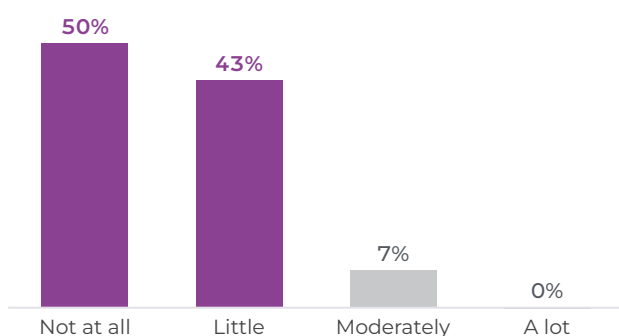
have received any formal AI training

Q: How did you mainly learn to use AI tools? · Have you received formal training on AI? · How would you rate your own knowledge of AI applied to medicine? Base: 30 medical residents.

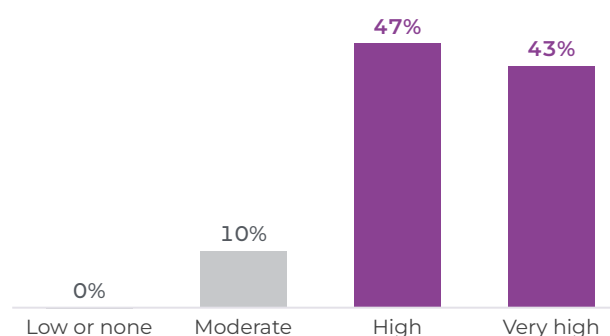
RESIDENTS FEEL THE MIR PROGRAM IS NOT PREPARING THEM FOR AI

93% say current MIR training prepares residents “little” or “not at all” to use AI properly, while 90% report high or very high interest in AI training.

How well MIR training prepares residents for AI



Interest in clinical AI training

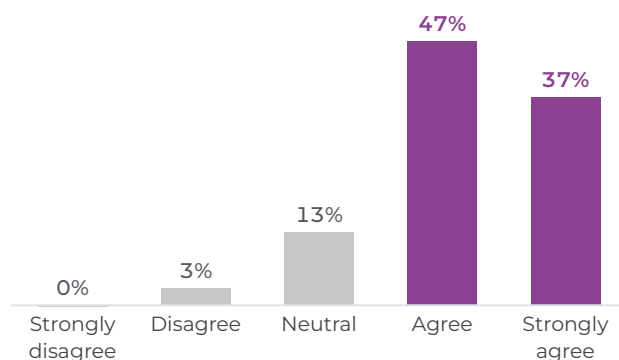


Q: To what extent does current medical training (MIR program) prepare residents to use AI appropriately? · How interested would you be in training on AI applied to clinical practice? Base: 30 medical residents.

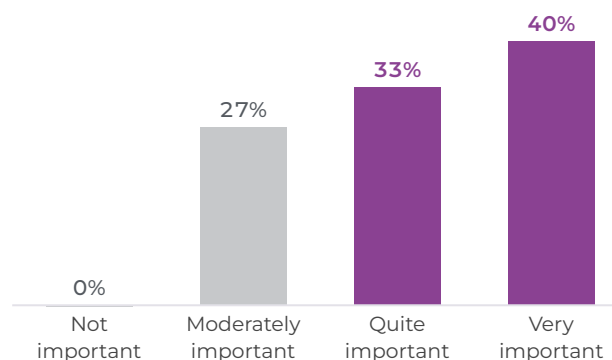
AI SKILLS SHOULD BE PART OF OFFICIAL MEDICAL TRAINING

83% agree that AI should be incorporated into official MIR training programs, and 73% consider AI competence very or quite important for the doctors of the future.

“AI should be incorporated into official MIR programs”



Importance of AI as a future professional competence



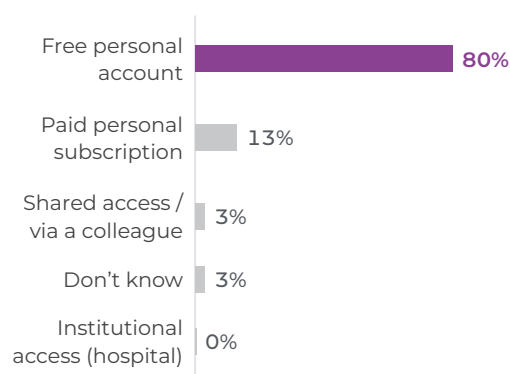
Q: Level of agreement: “AI should be incorporated into official MIR training programs.” · Do you think handling AI will be an important professional competence for doctors in the future? Base: 30 medical residents.

4 Access, safeguards and governance

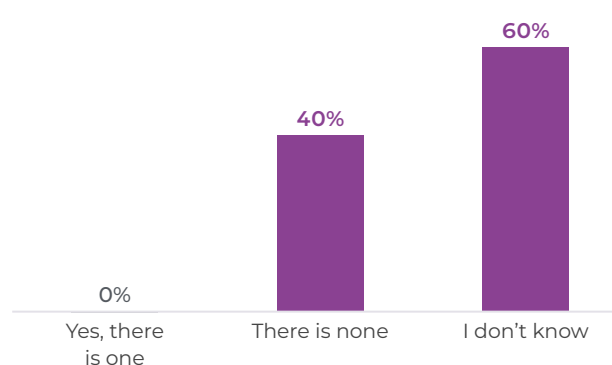
RESIDENTS BRING THEIR OWN AI

80% access their main tool through a free personal account, and none reports institutional access. No respondent is aware of a hospital policy on clinical AI.

Access to the most-used tool



Does your hospital have an AI policy?

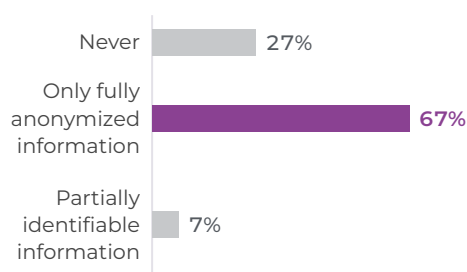


Q: How do you access the tool you use most often? · Do you know whether your hospital or service has a policy or guideline on the use of AI in clinical practice? Base: 30 medical residents.

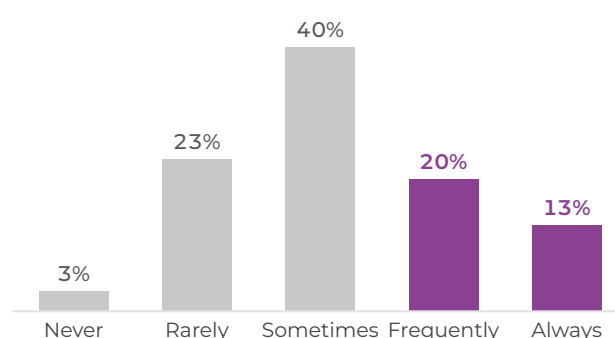
AWARE OF RISKS, BUT WITH UNEVEN SAFEGUARDS

67% enter only fully anonymized patient data and 27% never enter any, but 7% have entered partially identifiable information. Only 33% regularly verify AI output against independent sources.

Patient information entered into AI tools



Verification of AI output with independent sources



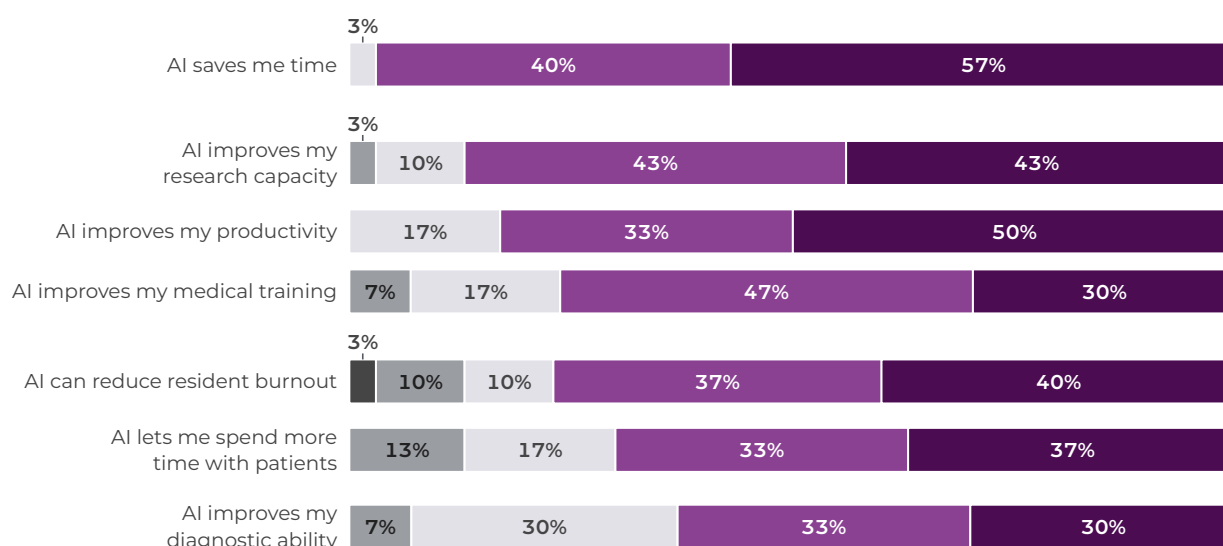
Q: Have you entered patients' clinical information into AI tools? · How often do you verify the information provided by AI using independent sources? Base: 30 medical residents.

5 Benefits, concerns and barriers

RESIDENTS SEE CLEAR BENEFITS IN THEIR DAILY WORK

97% agree AI saves them time, and 87% that it improves their research capacity. Views are more mixed on diagnostic ability and on more time for patients.

Strongly disagree Disagree Neutral Agree Strongly agree

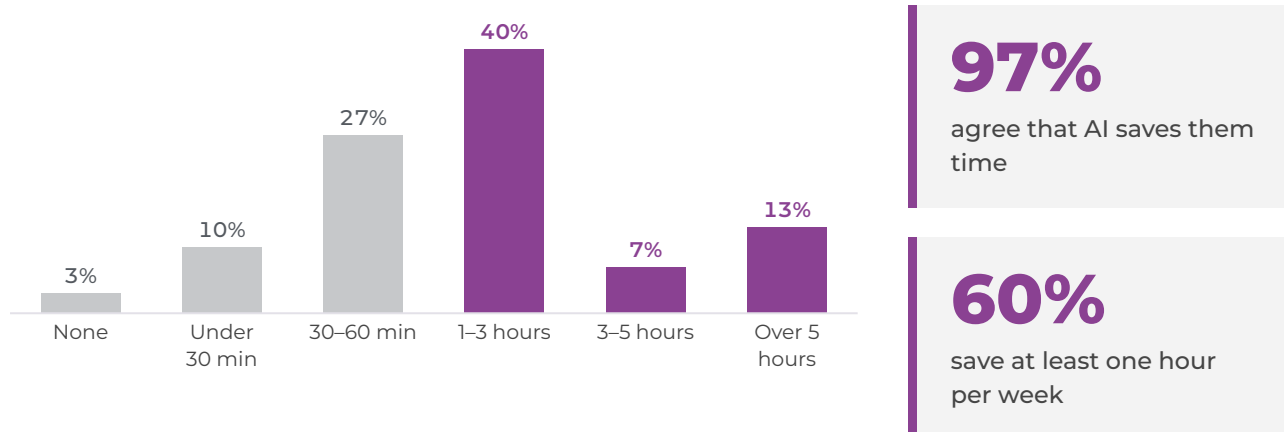


Q: Indicate your level of agreement with each statement. Base: 30 medical residents.

MOST RESIDENTS SAVE AT LEAST AN HOUR A WEEK

60% estimate that AI saves them at least one hour per week, and 13% report savings of more than five hours.

Estimated time saved per week



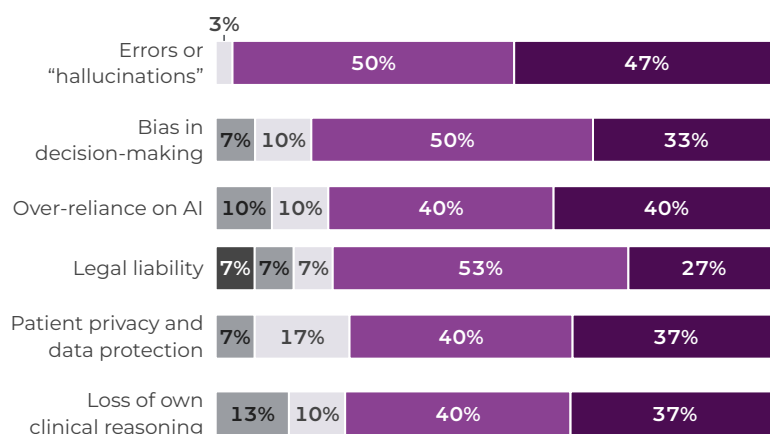
Q: How much time do you estimate you save each week thanks to AI? Base: 30 medical residents.

BENEFITS COME WITH WELL-IDENTIFIED CONCERNS

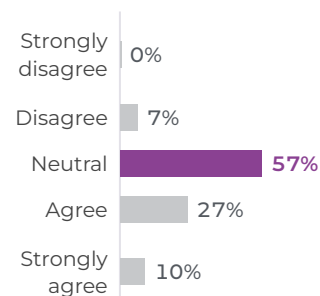
97% worry about errors or “hallucinations,” and 83% about bias in decision-making. Trust is cautious: 57% are neutral about the information AI provides.

“I am concerned about...”

Strongly disagree Disagree Neutral Agree Strongly agree



“I trust the information provided by AI”

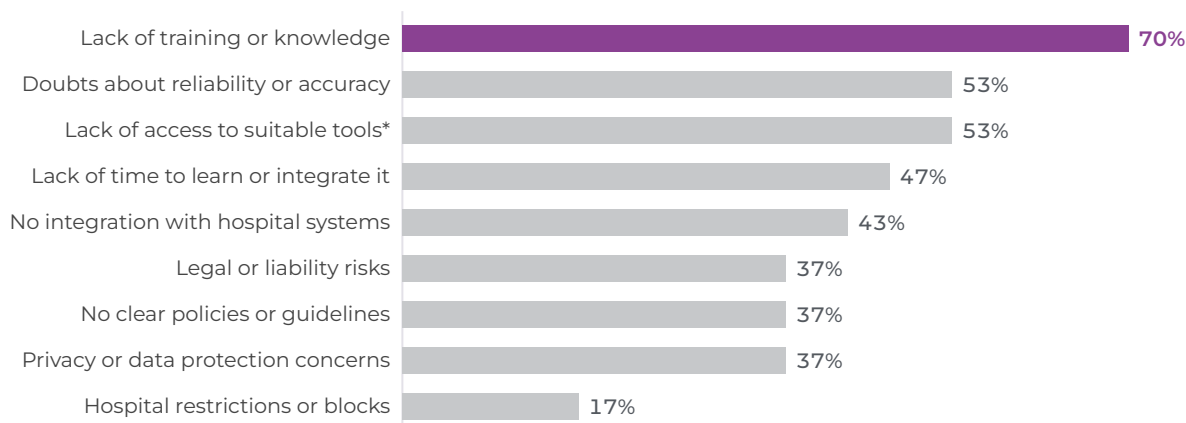


Q: Indicate your level of agreement with each statement. Base: 30 medical residents.

LACK OF TRAINING IS THE MAIN BARRIER TO WIDER USE

70% cite a lack of training. Doubts about reliability and lack of access to suitable tools follow (53% each); only 17% cite restrictions imposed by their hospital.

Barriers encountered (% of respondents)



*Paid tools, no institutional license, or not available in Spain/the EU.

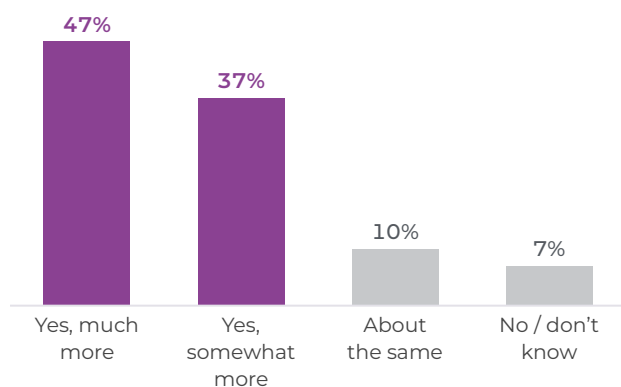
Q: What barriers have you encountered to using AI in your practice? (multiple answers) Base: 30 medical residents.

6 Policy and the future

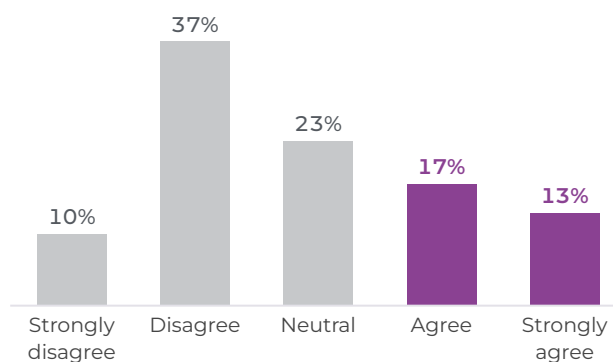
WITH THE RIGHT CONDITIONS, RESIDENTS WOULD USE AI MORE

83% would use AI more if they had adequate tools, training and clear guidelines. Only 30% feel that current institutional restrictions hold them back.

Would use AI more with tools, training and guidelines



"Institutional restrictions prevent me from using AI as much as I would like"



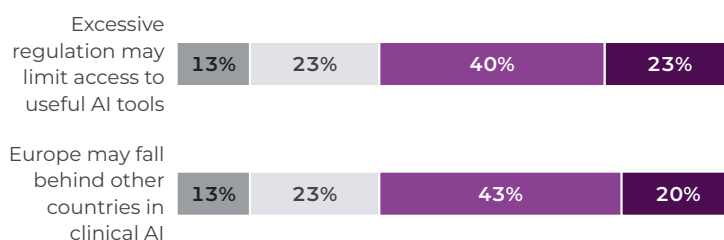
Q: If you had adequate tools, training and clear guidelines, would you use AI more than you do now? · Level of agreement: "Current institutional restrictions prevent me from using AI as much as I would like." Base: 30 medical residents.

CONCERN ABOUT OVERREGULATION AND EUROPE FALLING BEHIND

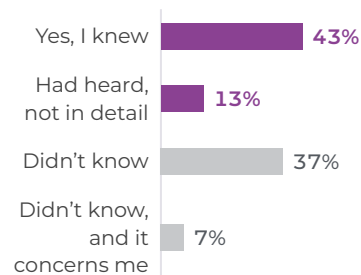
63% worry that excessive regulation could limit access to useful AI tools, and the same share fear Europe lagging behind. More than 50% knew at least something about clinical AI tools being unavailable in the EU.

"I am concerned that..."

Strongly disagree Disagree Neutral Agree Strongly agree



Aware that some clinical AI tools are unavailable in the EU?

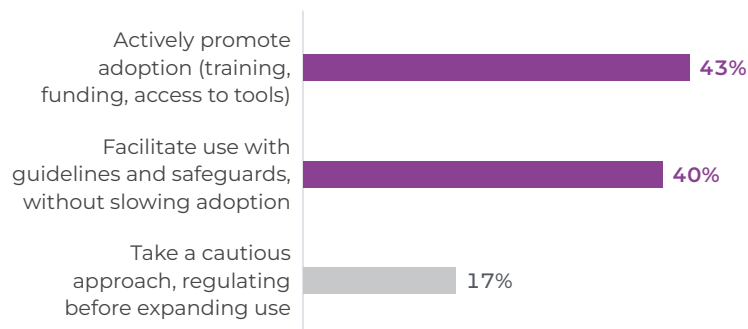


Q: Level of agreement: "I am concerned that excessive regulation may limit access to useful AI tools" · "...that Europe may fall behind other countries in the clinical use of AI." · Were you aware that clinical AI tools used by doctors in other countries are not available in Spain or the EU for regulatory reasons (e.g. OpenEvidence, ChatGPT for Clinicians)? Base: 30 medical residents.

RESIDENTS WANT HEALTH AUTHORITIES TO ENABLE ADOPTION

83% believe the health administration should actively promote AI or facilitate its use with guidelines and safeguards; 17% prefer regulating before expanding its use.

Preferred approach of the health administration



83%

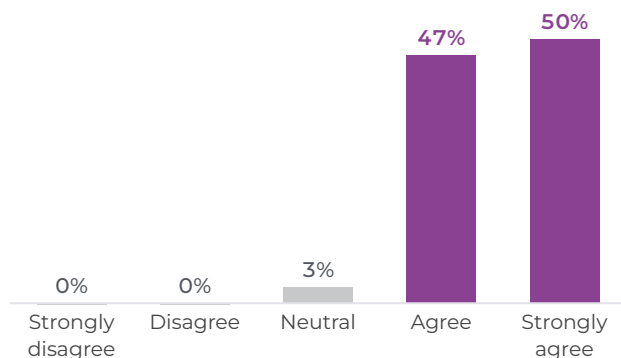
want authorities to promote or facilitate AI adoption

Q: What approach should the health administration take toward AI in medicine? Base: 30 medical residents.

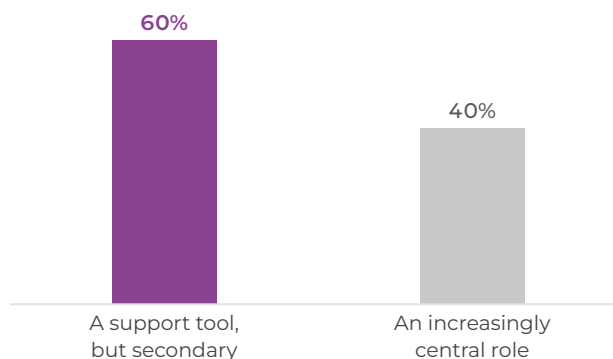
OPTIMISTIC, BUT REALISTIC ABOUT AI'S ROLE

97% expect AI to significantly improve medicine over the next 10 years, yet 60% see it as a support tool rather than a central one.

"AI will significantly improve medicine in the next 10 years"



Expected role of AI in medicine

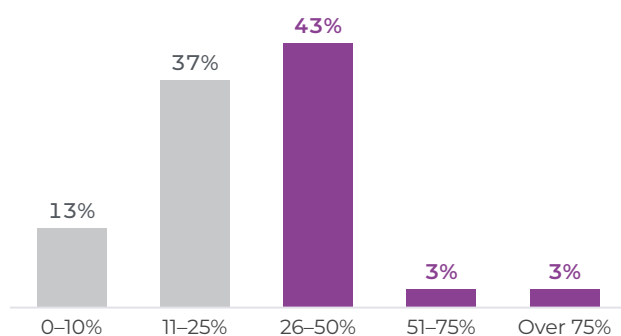


Q: Level of agreement: "AI will significantly improve medicine in the next 10 years." · How do you think the role of AI in medicine will evolve over the coming years? Base: 30 medical residents.

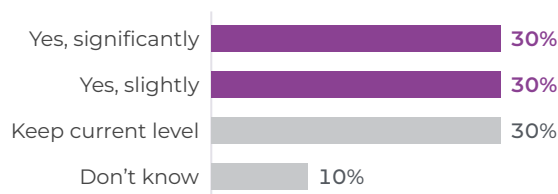
AI'S FOOTPRINT IN RESIDENTS' WORK IS SET TO GROW

87% expect AI could support more than a tenth of their work within five years, and 50% put it above a quarter. 60% plan to increase their use over the next 12 months.

Share of work AI could support within five years



Intention to increase use in the next 12 months



Q: What percentage of your work do you think AI could support or assist over the next five years? · Do you intend to increase your use of AI over the next 12 months? Base: 30 medical residents.

IMPLICATIONS: WHAT THESE FINDINGS SUGGEST

This section reflects We Are Innovation's reading of the results. Given the exploratory nature of the study, these points are offered as a contribution to the debate, not as definitive conclusions.

1 Invest in training, not restrictions

Residents are already using AI, but almost none have been taught how. With 93% saying the MIR program prepares them little or not at all, 90% expressing strong interest in training, and 83% supporting its inclusion in official curricula, the priority is clear. The best safeguard is a well-trained doctor, not a prohibition. Training should cover how to use AI clinically, how to check its output, its limitations and how to protect patient data.

2 Offer simple guidance, not new layers of bureaucracy

No respondent was aware of a hospital policy on clinical AI, and most did not know whether one exists. What residents need is short, practical guidance on good practice: which tools are appropriate, what information can be entered and how results should be verified. Such guidance should help doctors use AI with confidence. It should not become another layer of approvals, paperwork or blanket bans that pushes use out of sight.

3 Open the door to reliable tools

Four in five residents rely on free personal accounts, and none has institutional access. Hospitals and health services should make high-quality tools easy to adopt, ideally integrated with clinical systems, a gap cited by 43% of respondents. Procurement and approval processes should be fast and proportionate. The more good tools doctors can reach, the less they depend on whatever happens to be freely available.

4 Trust professional judgment and strengthen it

Residents are well aware of the risks: 97% worry about errors or “hallucinations.” Yet only one in three regularly verifies AI output against independent sources, and a small minority has entered partially identifiable patient information. The answer is not to take tools away but to build good habits through training, shared best practices and better-designed tools. Doctors already work within strong frameworks of professional ethics, data protection and clinical responsibility, and these remain the right foundation for using AI well.

5 Default to permissionless innovation, and keep Europe competitive

Nearly two-thirds of residents worry that excessive regulation could limit access to useful tools, and the same share fear that Europe is falling behind. This is already happening: some clinical AI tools used by doctors elsewhere are unavailable in the European Union. Europe’s instinct has too often been precautionary, asking innovators to prove in advance that nothing could ever go wrong before doctors and patients are allowed to benefit. But blocking experimentation is not risk-free. Its cost is the better diagnoses, saved time and improved care that never materialize, and doctors and patients pay it. Europe should instead make freedom to experiment the default and respond to real problems if and when they arise. In practice, that means:

- addressing concrete, demonstrated harms with targeted remedies rather than pre-emptive rules for hypothetical ones
- relying on the frameworks that already govern medicine, including professional ethics, liability and data protection, before creating new ones
- favoring flexible tools such as best practices, professional guidance and regulatory sandboxes over rigid, one-size-fits-all legislation
- recognizing tools already proven in trusted jurisdictions instead of forcing them to start from scratch

The question should not only be what could go wrong if doctors use AI, but also what is lost when they cannot.

6 Build a stronger evidence base

This study captures the views of 30 residents. Larger, representative research across specialties, career stages and European countries would help policymakers and health institutions base decisions on how doctors are actually using AI, rather than on assumptions about what might go wrong.

ABOUT WE ARE INNOVATION

We Are Innovation is a dynamic network of individuals and institutions who deeply believe in innovation's power to drive progress and solve the world's most pressing problems. With over 60 think tanks, foundations, and NGOs based worldwide, We Are Innovation represents the diverse voices of a global civil society committed to advancing human creativity, adopting new technologies, and promoting innovative solutions. Through our collaborative approach and cutting-edge expertise, we are driving global transformative change. To learn more about our work, visit us at <https://weareinnovation.global/>.



<https://weareinnovation.global/>