

Pharma & Life Sciences Solutions Team

White paper

Credibility, convenience and connection

Exploring why physicians are online



The Pharma & Life Sciences Solutions Team is responsible for developing solutions for pharmaceutical companies, medical equipment/device companies, medical communications agencies, and medical societies to engage with Elsevier's community of researchers, senior scientists, and healthcare professionals.

Credibility, convenience and connection

Exploring why physicians are online

Physicians today are working in a fast-changing environment with a unique combination of dynamic factors affecting the way they gather information and treat patients. From widespread shortages in medical personnel and a growing number of medical students changing paths, to exponential growth in published information and emerging technologies changing the nature of work, physicians face growing pressure.¹

Despite these challenges, most physicians report being dedicated to their calling of improving patients' lives,¹ and they are keen to find ways to keep up-to-date with research, guidelines and best practices.

For healthcare brands, this presents an opportunity to engage physicians by helping them find the information they need and gain the confidence they seek – whether in diagnosis, treatment, or providing ongoing patient education.

Marketing to meet the needs of physicians

In the past few years, with the advent and availability of actionable analytics, many brands have been taking an omnichannel approach to physician marketing, which highlights physicians' need for convenience in their use of online information.

But what other factors are important to consider when developing a marketing strategy to engage physicians? Now in its fourth edition, Elsevier's global physician research aims to give you the insights you need.

Between October 2023 and January 2024, we surveyed physicians around the world to understand how they use online resources and social media platforms for professional purposes. A total of 1,307 physicians responded, including 297 in the USA, 698 in EMEALA and 312 in APAC. Of the respondents, 60% were secondary care clinicians, 30% primary care clinicians and 9% trainee doctors.

This white paper presents the latest research, drawing out trends in behavior since the first survey in 2019, and highlighting opportunities to engage physicians in our current market.



1,307

physicians responded

60%

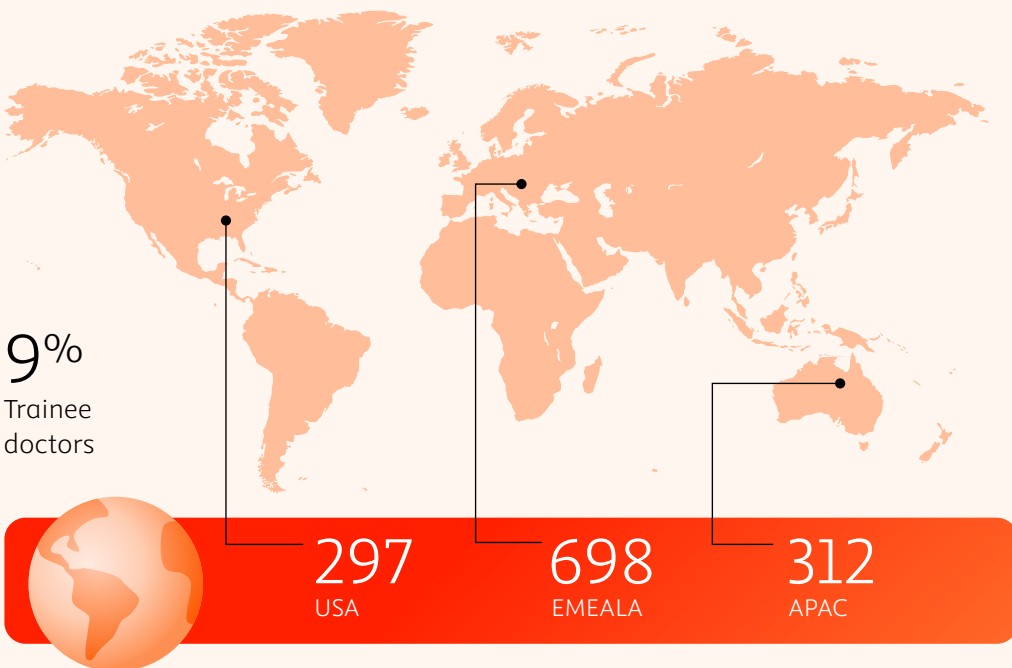
Secondary care clinicians

30%

Primary care clinicians

9%

Trainee doctors



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About the Physician Use of Online Resources and Social Media research series

2019

Physician Use of Online Resources and Social Media

- Quantitative online survey
- 1937 physicians

2021

Physician Use of Online Resources, Social Media and Patient Education Materials

- Quantitative online survey
- 1,778 physicians

2022

Physician Use of Online Resources and Social Media

- Quantitative online survey
- 1,727 physicians

2023

Physician Use of Online Resources and Social Media

- Quantitative online survey
- 1,307 physicians

Meet the physicians

In addition to the global survey, we conducted in-depth interviews with three physicians to gain more detailed insights into their use of online resources and social media.



USA

Dr. Tyesse Gaines is a practicing physician in emergency medicine as well as sports and lifestyle medicine, with 13 years' experience. She works at two emergency departments in South Florida, Plantation General and West Side Regional, and at McDonough District Hospital in McComb, Illinois, USA.



APAC

Dr. Alexander van Akkooi is a surgical oncologist in Sydney, Australia with 20 years' experience. He is an associate professor at the University of Sydney, a faculty member and the chair of melanoma surgical oncology at Melanoma Institute Australia, and a clinical academic at the Royal Prince Alfred Hospital.



EMEALA

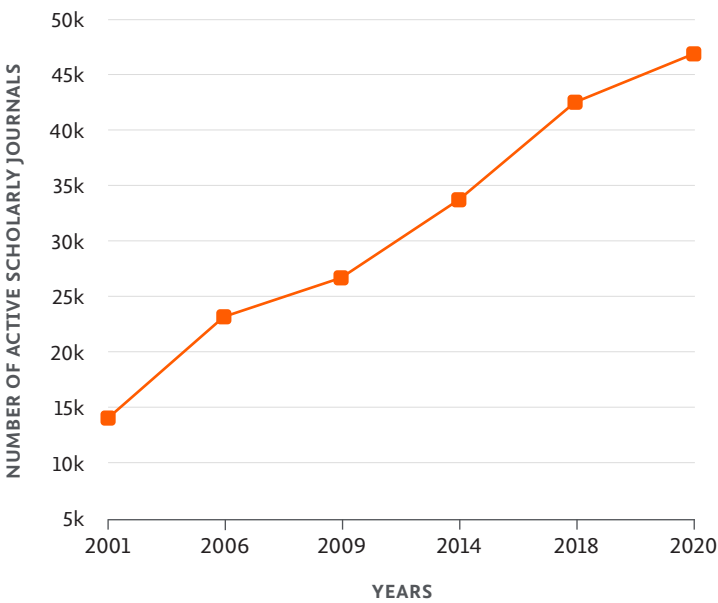
Dr. Matthew Kirkman is a neurosurgeon at Nottingham University Hospitals in England, with four years' experience.

So much content, so little time

Physicians are not new to the task of keeping abreast of new developments in the medical field. This was already a notable challenge almost a decade ago, with researchers sharing their struggles – like spending as much as eight hours a week scanning sources to find information.²

Pressure is mounting on physicians to keep up with the latest research. As of December 2023, [Scopus](#) had more than 94 million records – a growth of 4 million in under a year. By May 2024, [PubMed](#) listed 37,279,974 results, 2 million more than the previous year.

As well as making the task of keeping up to date significantly more difficult, this unprecedented growth is also potentially affecting physicians' wellbeing. One survey of US physicians revealed that 60% often have feelings of burnout – a rate that has been sustained since the COVID-19 pandemic.³



Exponential growth in scientific publishing
The number of peer-reviewed journals has grown significantly in the last two decades.⁴

Physicians are supporting more patients than ever

Number of patients physicians see on an average day

Globally

2024
24
Patients

2023
22
Patients


.....

Regionally – 2024

USA
17
Patients

EMEALA
21
Patients

APAC
32
Patients



This heightened pressure and burnout may also be connected to an increase in the number of patients physicians see on average. According to Elsevier's 2024 physician survey, physicians see 24 patients a day on average globally, up from 22 in 2023.

Aside from the time spent with a patient, another important and time-consuming aspect of patient care is searching online for information: on average, physicians do this for one in four (24%) of their patients. While physicians do this for fewer patients in Japan and Germany (16%), those in Australia and New Zealand (ANZ) spend time searching for information for one-third of the patients they see.

This has a significant impact on physicians' time, as they spend an average of 15 minutes per patient searching online, and as much as 19 minutes (in India) and 24 minutes (China).



Building trust with credible content

Trust is vital in the clinician–patient relationship, and this extends to trust in the information on which clinical decisions are based.⁵ In their Annual Trends 2024 predictions, which look at the trends expected to impact scholarly communications in the next three to five years, STM, a leading global trade association for academic and professional publishers, highlighted transparency, trust and integrity, with a significant focus on “seeking the source of trust and truth.”^{6,7}

Elsevier's physician research reflects the importance of trust and the trends in transparency, integrity and truth. In 2024, credibility remains key, representing the characteristic most likely to influence physicians' selection of online resources.

“If I change my practice habits or if I relay that information to a patient, I want to make sure that that information is accurate and based on actual data... I'm looking for credible institutions, credible clinicians that are putting their names behind these particular publications.”

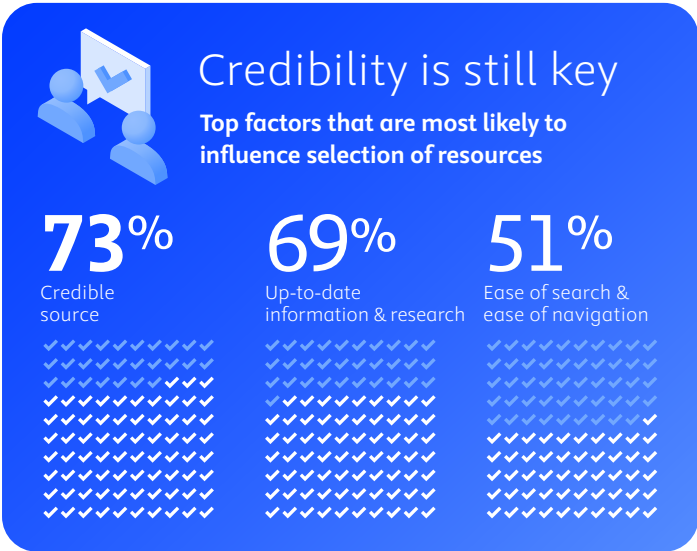
– Dr. Tyesse Gaines

“Credibility is hugely important when choosing sources of information because you want to be absolutely sure that the data you're looking at and that you potentially use in practice is reliable data.”

– Dr. Alexander van Akkooi

“As a physician, I want to make sure that the information I'm using to treat my patients is reliable and safe. And credibility gives me the confidence that the information is accurate and trustworthy.”

– Dr. Matthew Kirkman



Globally, 73% of physicians consider credibility the most important factor in their content-selection decisions. While this shows a decline compared to previous years (82% in 2022 and 81% in 2021), agreement in some areas was higher in 2024, including in Brazil (83%) and ANZ (85%).

The importance of credibility is reflected in the continued importance of treatment guidelines for staying informed, with 83% of respondents considering them an important source of information in 2024.

The next biggest factor for HCPs when making content selections – up-to-date information and research (69%) – also highlights the pressure physicians are under to keep up with the latest developments.

Dr. Matthew Kirkman's content credibility questions

WHO	WHERE	HOW	WHAT
Who created the information? What are their qualifications? Have they published on the topic previously? What is their experience?	Where has the information been published? If it's a journal, is it a journal with a rigorous peer review system? What is the impact factor of the journal?	Was it a randomized control trial? How many subjects were recruited? Where was it performed? Does the population of the study reflect the population of my own practice? Are there potential sources of bias and conflicts of interest?	Is the medication that the study involved actually available to me for prescribing to my patients?

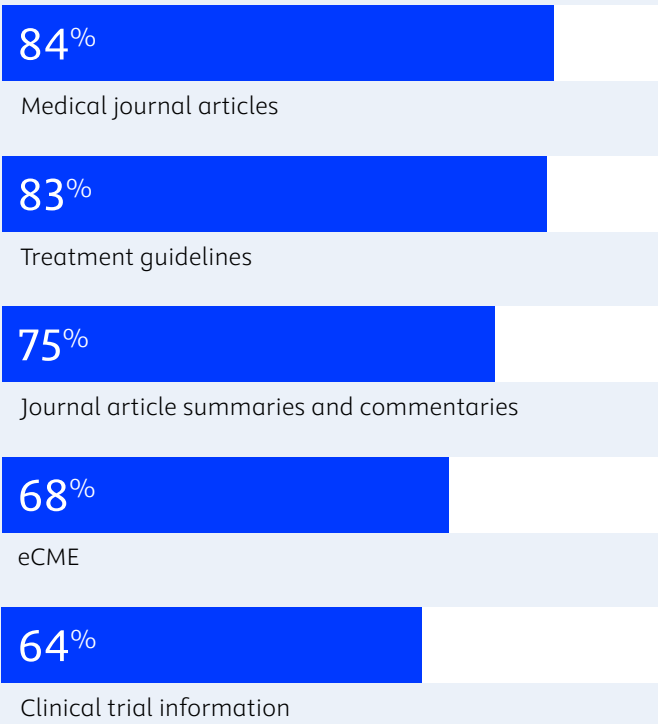
Medical journals lead the way

When it comes to staying informed of the latest developments, physicians most rely on medical journal articles, with 84% considering them a top source of information. Physicians in United Arab Emirates (UAE) (97%) are most likely and those in Germany (72%) least likely to consider medical journal articles important for staying informed.

Interestingly, there were some regional differences in the change in **physicians' ranking of medical journals as their top source of information between 2022 and 2024**:

COUNTRY/REGION	2024	2022	
Global	84%	82%	^
France	86%	89%	v
USA	85%	82%	^
Spain	82%	89%	v
UK	81%	74%	^
Japan	77%	58%	^
Poland	76%	86%	v
Germany	72%	69%	^

The 5 most important resources to physicians for staying informed



What makes medical journals so important?

“Medical journals are influential into my clinical practice, but... there's somewhat of a delay between the information being published in a journal and then folks building it into their clinical practice.”

– Dr. Tyesse Gaines

“Medical journals influenced my work hugely because they present the latest data and even ahead of guidelines being changed, they sometimes can make you change your practice to adopt simple things to make your practice more efficient or your results better.”

– Dr. Alexander van Akkooi

“Medical journals have a big influence, both in my role as clinician and as a scientific researcher. They often represent the current trends in medical fields, and I find them very useful in understanding the latest trends in clinical practice. In addition, I find review articles, systematic reviews and meta-analyses particularly useful.”

– Dr. Matthew Kirkman



Medical journals not only help physicians stay up-to-date with the latest developments, but also influence their prescribing habits. Neurosurgeon Dr. Matthew Kirkman recalled an example: *“There was a paper published last year, which related to the management of chronic subdural hematomas and evaluated the role of steroids. The study found that steroids caused harm to patients with this condition, and therefore, I don’t prescribe it routinely in my practice anymore.”*

Journal articles can provide a deep dive into a particular topic, which can make it challenging for physicians to consume the information in the course of a busy day. For this reason, journal article summaries or commentaries remain valuable, with 75% of physicians saying they are important for keeping up to date.

“Highlights in journal articles are extremely useful because everybody’s time poor. So if you want to have a very quick rundown of the facts that are presented in that article, the highlight is usually a good way to start. And then if you’re interested and you have some more time, you can read the full paper later on.”

– Dr. Alexander van Akkooi

Globally, these summaries retained their importance between 2022 and 2024, but at the country level there were some significant changes. In Germany (53% in 2022 to 69% in 2024) and Brazil (47% to 70%) importance increased, while in France (80% to 65%) and Spain (79% to 65%) it decreased.

Physicians are interested in additional journal-related activities



Personal connection, offline and online

While physicians are increasingly keen to connect with colleagues and gather information in person, they still value online communication and resources. Weekly exposure to online resources, including Google (94%), hospital intranet (89%), email newsletters (87%) and medical apps (84%) highlights the ever-growing importance of digital content and communication.

It is also evident in physicians' preferences for content: most physicians (56%) globally prefer to receive medical journal articles in print and online, while 38% prefer online only. Physicians in UAE (57%) and Japan (69%) are most likely to want medical journal articles only online, and physicians in Poland (65%), China (66%), the USA (62%), India (62%) and Spain (61%) prefer both print and online. Though in the minority, physicians in Germany (13%) and the UK (12%) prefer print only.

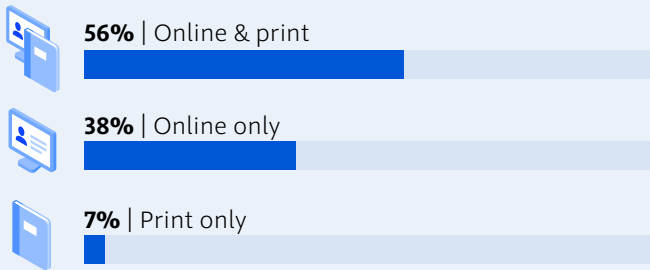
A similar pattern is evident for treatment guidelines, with 52% of physicians globally opting for online and print, 42% online only and 6% print only.

Localization factors in here too, with most physicians preferring to read medical information in their local language. This is especially the case in China (64%), Japan (58%) and Spain (56%). This is an important consideration for communications like newsletters, which are filling up physicians' inboxes. On average, physicians receive 10 newsletters per week. And one in five physicians in Japan receive more than 20 a week.

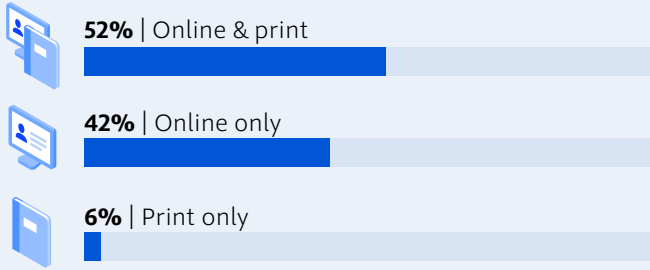
Globally, 56% of physicians prefer to receive medical journal articles in print and online, while 38% prefer online only.

Preferred content format:
print, online or both?

Medical journal articles



Treatment guidelines



Content and community

Physicians extensively rely on summaries and commentaries to stay abreast of the latest research and clinical advancements. Furthermore, 39% of physicians deepen this engagement by actively discussing journal articles in forums with their peers, and 36% share them with colleagues.

This highlights one aspect of social media that physicians value: peer-to-peer networking and feeling as they are a part of a specialized community.

“I am active on social media and social communities, being able to connect with other physicians either in my specialty or part of certain affinity groups, and talking about the topics that are vital to our practice.”

– Dr. Tyesse Gaines

As Dr. Alexander van Akkooi notes, social media also provides a useful channel for updates on conferences, where physicians can meet each other in person: *“I tend to flick through social*

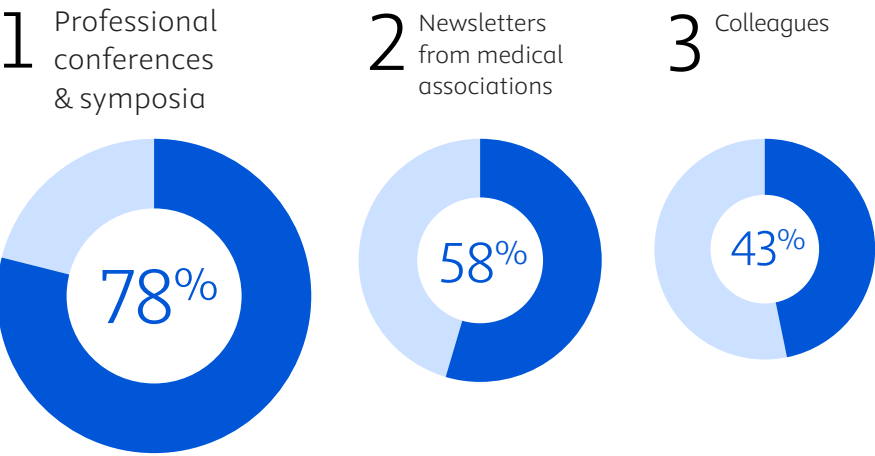
media for medical use at least once a day to just see if there is any new posts on new conferences, new articles, new developments [from] my peers.”

According to the survey, international medical conferences are more popular now, post-COVID-19, than in previous years, with 56% of physicians considering them important sources for keeping informed, up from 51% in 2022. The increase in importance is greatest in the USA (28% in 2022 to 39% in 2024), France (59% to 68%) and Germany (43% to 57%).

Professional conferences and symposia are the number one most preferred channel for new medical developments at the country level, with physicians in EMEALA and USA more likely to rank them in the top three in 2024 than in 2022.

The two next most popular channels for information on medical developments – newsletters from medical associations (58%) and colleagues (43%) – also reflect the importance of peers and community.

Top three channels for information about new medical developments



“I think that professional conferences are very important when it comes to new medical information... I think it's a way to get things kind of hot off the presses.”

– Dr. Tyesse Gaines

“Conferences are the best source to get the latest information because everybody will be presenting their novel work at a conference. So to see what is going on in the field in a quick snapshot, it's really good to go to a conference and collect that information.”

– Dr. Alexander van Akkooi

“Without question conferences and symposia are extremely important sources of the latest clinical information and are important for networking as well... But before making any changes to my practice based on conference findings, I'd generally want to see the hard data behind the presentation, and that's why I find medical journals really important in this regard.”

– Dr. Matthew Kirkman

Connect and care

Social media plays a vital role in enabling physicians to connect online. This resulted in an increase in social media usage during the COVID-19 pandemic. In the 2022 survey, 49% of physicians predicted their use of social media for professional purposes will increase in the future. Although there has been a decrease in weekly usage since 2022 (94%), we do see a relatively high rate in 2024, with 84% of physicians using social media weekly.

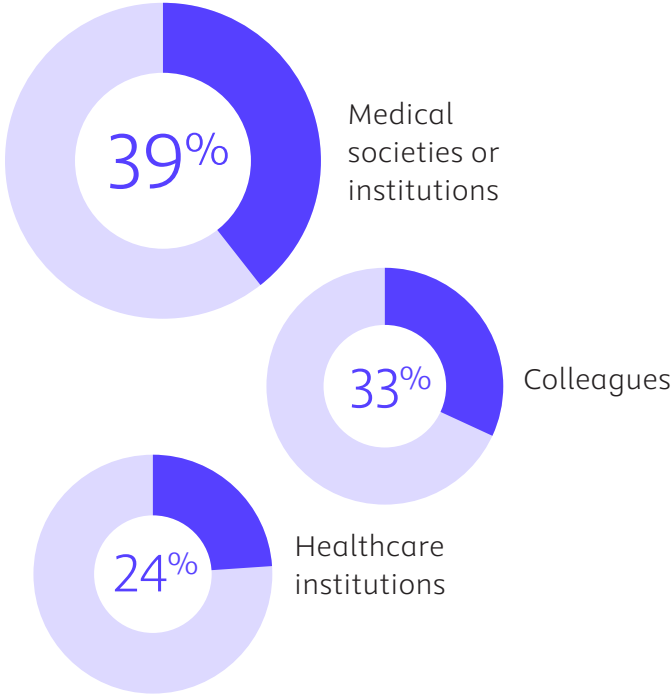
Physicians are most likely to follow medical societies or institutions (39%), colleagues (33%), and healthcare institutions (24%), helping them stay connected at a distance and when they're busy.



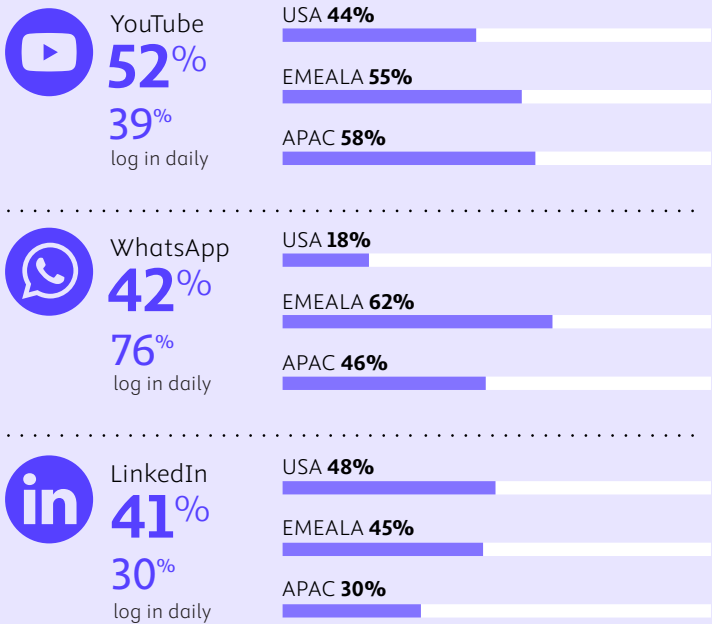
Physicians use a range of platforms for professional purposes, including YouTube, WhatsApp and LinkedIn.

As you would expect, physicians' preferences for social media platforms are also strong for medically-specific platforms like Doximity, Sermo, DailyRounds, and Doctors.net.uk.

Most likely followed for professional purposes



Most common social media platforms used by physicians



Tweet to treat

Despite being important, connection isn't the main reason physicians are logging in: they use social media primarily to keep up to date with news in their medical specialty or practice (71%), general news on the topic of healthcare (53%) and information about conferences or congresses (48%). This usage almost matches that in 2022. Indeed, when asked about their preferred channel for medical developments, 18% of physicians rank social media in their top three.

For example, Dr. Tyesse Gaines recalls how medical groups and communities on social media helped get the latest information to physicians about the best way to treat a recent rise in seizures induced by synthetic marijuana. Similarly, these channels helped clinicians share information about COVID-19 during the pandemic. *"There was no time in the early days of the pandemic to wait for research to come out... #medTwitter got very popular during the pandemic, even though it existed before then."*

As social media has become a significant channel for medical information, physicians also consider it important to monitor the reliability and credibility of the information shared on the channels.

For this reason, some consider it important to get involved where they can.

"I do have concerns with the use of social media for professional purposes because it's not a peer-reviewed platform... anybody can post anything, and it doesn't have to be evidence-based."

– Dr. Tyesse Gaines

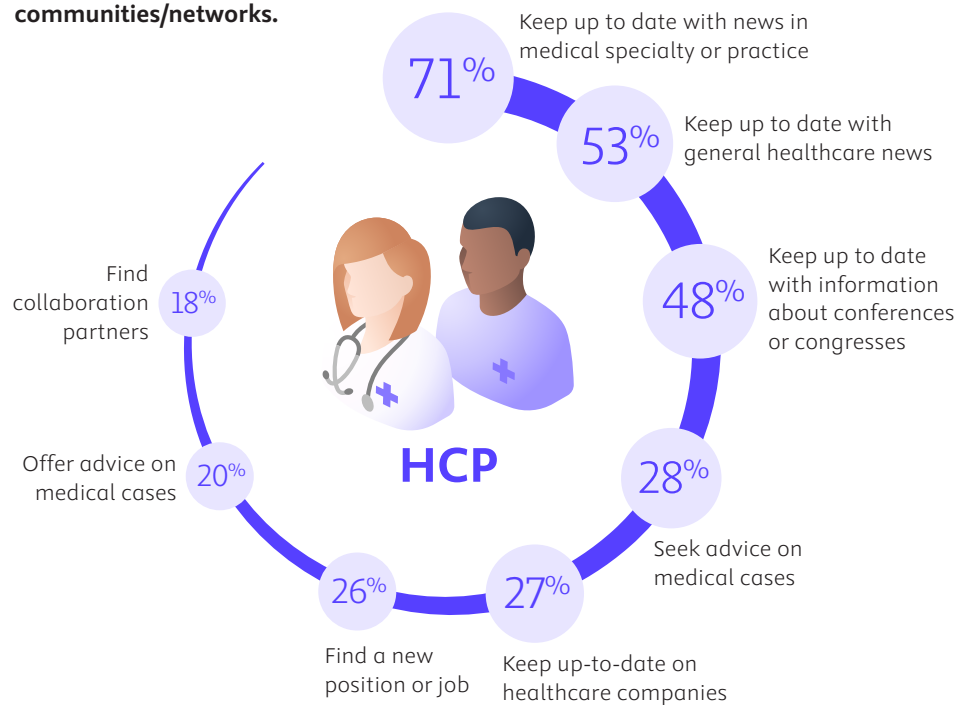
"As medical professionals, we need to remain professional. It's very important that we are aware that what we put out there on social media can be interpreted in different ways, and potentially negatively."

– Dr. Alexander van Akkooi

"If every physician and every APC decided to never post anything on social media that had to do with medicine, there's still going to be medical information being put on social media. I think it's important for us to be involved in that conversation. Otherwise, we're just leaving non-professionals to spread medical information, sometimes misinformation."

– Dr. Matthew Kirkman

Key reasons for accessing social communities/networks.



	2019	2021	2022	2024
News covering their medical specialty	67%	70%	71%	71%
General news on healthcare topics	51%	54%	55%	53%
Information about conferences or congresses	50%	49%	53%	48%

Sharing is caring

When physicians engage with a medical-related post on social media, 47% click a link to read the full content of an article on another website, 45% search for more information on the topic, and 35% read others' responses to the post.

Globally, half (50%) of physicians believe social media can be beneficial for their professional career, a small decline compared to 2022 (52%). Physicians in the UK are particularly less optimistic, with agreement falling from 55% in 2022 to 36% in 2024.

Most physicians remain conscious of potential dangers: 74% are concerned about the security of their private information and 62% like to keep their professional and personal social media activity separate, down from 69% in 2022.

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After reading a medical-related post, physicians take action by



47%

Clicking a link to read the full contents of an article/paper



45%

Using a search engine such as Google or Bing to learn more about the topic



35%

Reading responses of others on a post



Tune in and advance

Video content is becoming increasingly important for physicians. Use of YouTube has increased significantly, with 82% of physicians using it at least weekly in 2024 compared to 77% in 2022, and 39% using it daily, up from 34% in 2022. This reflects a trend in physicians' use of multimedia content.

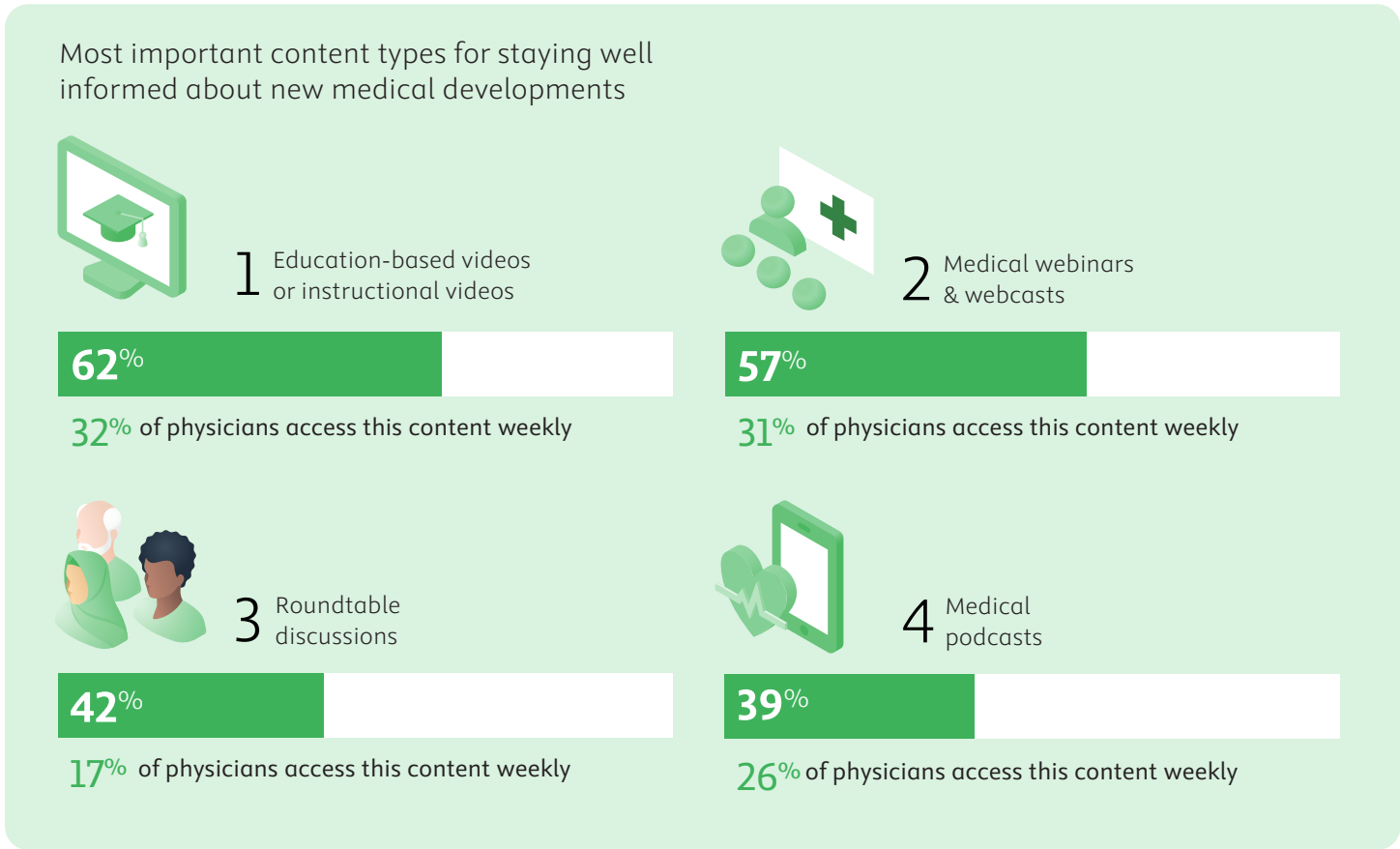
Physicians shared how important various content types are for staying informed about new medical developments. In particular, they use education-based videos or instructional videos (62%), medical webinars, and webcasts (57%), roundtable discussions (42%) and medical podcasts (39%).

As noted in Elsevier's 2023 white paper *Trends in physicians' use of online content*,⁸ webinars and webcasts have been gaining popularity. Although the initial bump in the popularity of webinars was caused by the lockdowns during the COVID-19 pandemic, it's clear their value has been recognized and carried along in a hybrid model as in-person events reopen. Use of medical webinars increased globally from 53% in 2022 to 57% in 2024.

Similarly, education-based videos have become more popular, with weekly use rising from 54% in 2022 to 62% in 2024, and use of medical podcasts has increased from 32% to 39%. There is some regional variation, for example, with use of education-based videos jumping from 41% to 67% in ANZ and 39% to 60% in Japan, and medical podcasts increasing from 33% to 55% in China over the two-year period.

Physicians are also interested in video interviews with key opinion leaders (20% globally, 40% in China) and video interviews with one of the authors (16% globally, 31% in Brazil).

Although the initial bump in the popularity of webinars was caused by the lockdowns during the COVID-19 pandemic, it's clear their value has been recognized and carried along in a hybrid model as in-person events reopen.



Videos & Multimedia

“I absolutely utilize video content to stay up to date for my clinical practice... actually probably more than written content these days... The main reason that I will look at medical related videos is a time factor. For one, it takes me much longer to read articles. It's beneficial if you're short on time or you're trying to multitask.”

– Dr. Tyesse Gaines

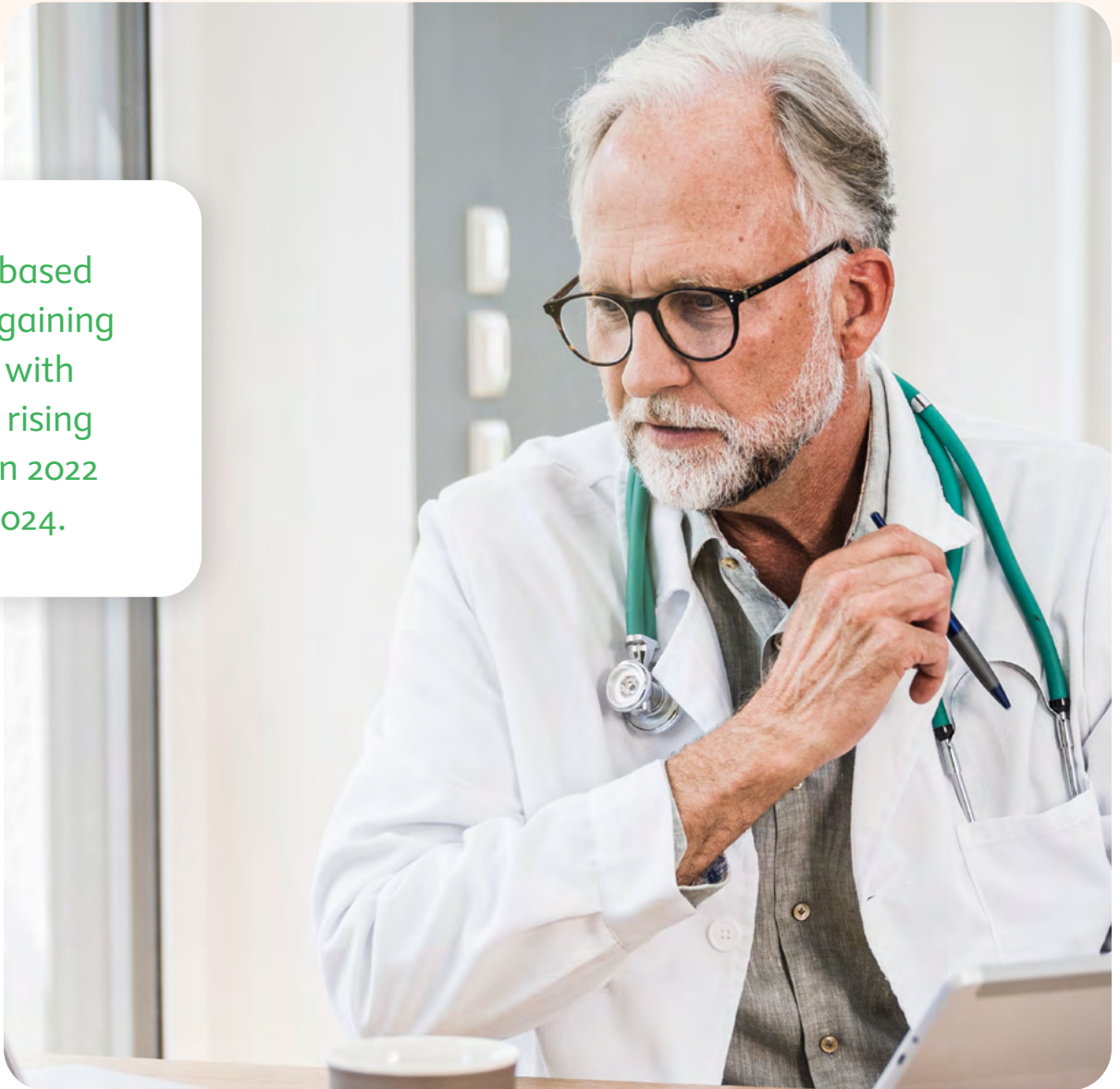
“I find education-based videos and instructional videos extremely important for my practice. I use the videos myself, for example, to explain conditions and diseases to the patients that I look after. I use the videos to teach my residents and even for myself to learn about new advances in medicine.”

– Dr. Matthew Kirkman

“Other sources of information like peer forums or interviews with key opinion leaders are very useful. If they're, for example, in podcast form when you're in the car, you can get a quick rundown of what actually that new information means to other people across the world.”

– Dr. Alexander van Akkooi

Education-based videos are gaining popularity, with weekly use rising from 54% in 2022 to 62% in 2024.



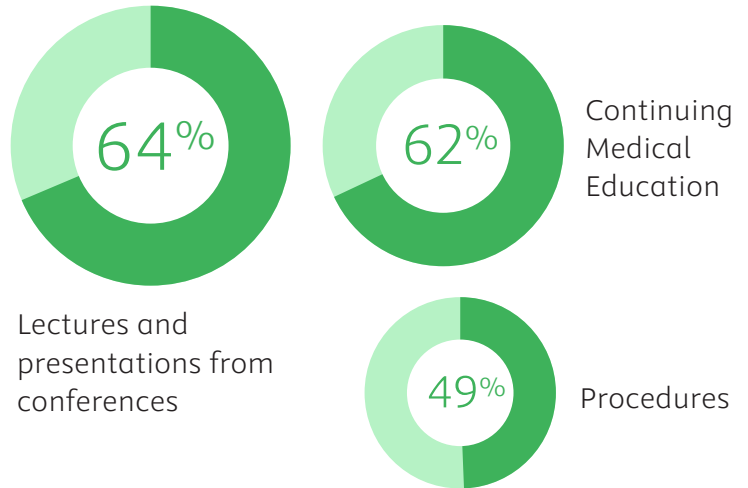
Lectures lead the way

Of all the different types of video content, physicians are most likely to watch videos of lectures and conference presentations (64%), followed by continuing medical education (62%) and procedures (49%).

“I’m a visual learner, so I find [medical-related videos] useful to understand complex concepts, and there are plenty of those in neurosurgery. The content that you can condense into a video is great, so I can save time relative to having to read a paper from the aspect of the patients that I look after and the residents that I train.”

– Dr. Matthew Kirkman

Most-watched medical-related videos



Pharma-sponsored content

Globally 53% of physicians are likely to watch pharma sponsored material, though they are aware of potential negatives.

“Pharma sponsoring of video content on one hand is undesirable because it potentially alludes to a conflict of interests. At the same time, academia usually does not have the resources to develop these type of tools, and they look for partnerships with pharma, and most pharma companies are actually trying to make a balanced video that reflects all of the information that is out there rather than just pushing their own agenda.”

– Dr. Alexander van Akkooi



Click for convenient content

As we have seen, physicians are short on time, and this is the biggest barrier to them using multimedia content: 49% cite lack of time as a reason for not watching videos. For 36% they are too long and tedious, and 24% cannot find the right topics and content.

It is therefore logical that physicians rarely watch videos during their working day, preferring to watch in their spare time, at the end of their working day, and during academic or research work.

While half of physicians lack time to watch videos, many also note the convenience of doing so – 48% say it's more convenient than attending a conference and 46% say the videos are quick to watch.

Almost half of physicians note that video content is interesting and engaging (45%) and easy to watch on a mobile device (45%) while 37% value learning from key opinion leaders (KOLs).

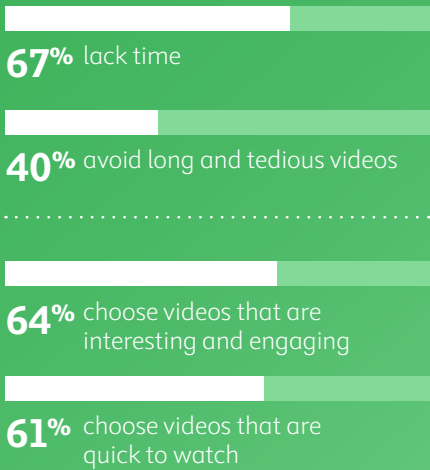
“I look at videos in two ways. First, there's purely content videos, like a lecture, someone talking about a particular topic – I think they're important because it allows the same information to be distributed in that person's particular learning style. And if you're busy, you can at least listen to the audio. Then there's a second aspect, which is procedures. I think sometimes it's very difficult to translate the steps of a procedure.”

– Dr. Tyesse Gaines

“Instructional videos or professional videos are a great source of information for teaching purposes. They can be used when teaching your fellows or registrars, and sometimes they can even be used in trying to explain a situation to a patient themselves.”

– Dr. Alexander van Akkooi

Factors affecting video content consumption by physicians in Australia and New Zealand



The future is digital

The steep curve toward digital that we saw during the pandemic has leveled off, as physicians continue to adjust to a new hybrid way of working.

But this doesn't mean stagnation: with the emergence of artificial intelligence (AI) and particularly generative AI tools like ChatGPT and Gemini, the picture will continue to change.

At Elsevier, we are committed to continuously monitoring these developments in order to provide actionable insights to help healthcare brands effectively connect with physicians and optimize their digital strategy.



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