

How do clinicians consume online medical reference information?

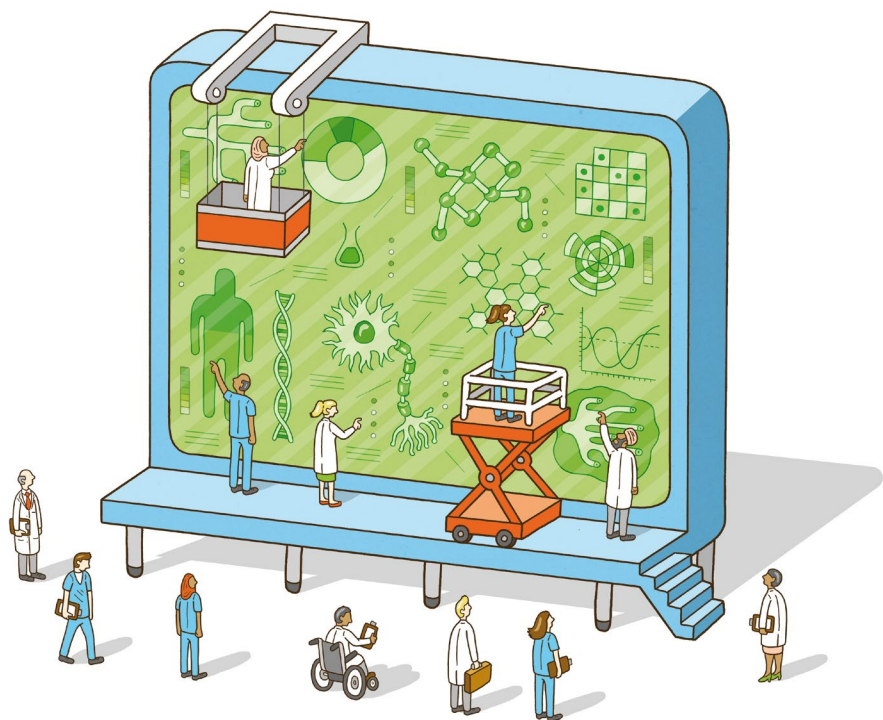
Learnings from Elsevier's
Use Case Research

At Elsevier, we have a rich history in collecting and disseminating evidence-based information. As a leader in the field, combining content with technology to turn information into actionable knowledge, we regularly conduct market research to understand how clinicians use online medical reference information, which helps guide our product development. We are also keen to share and explore our findings with key customers and thought partners.

With this in mind, we embarked on a global study, surveying 507 specialist clinicians and residents based on six use cases that we previously identified and validated through qualitative interviews to understand how clinicians use such information.

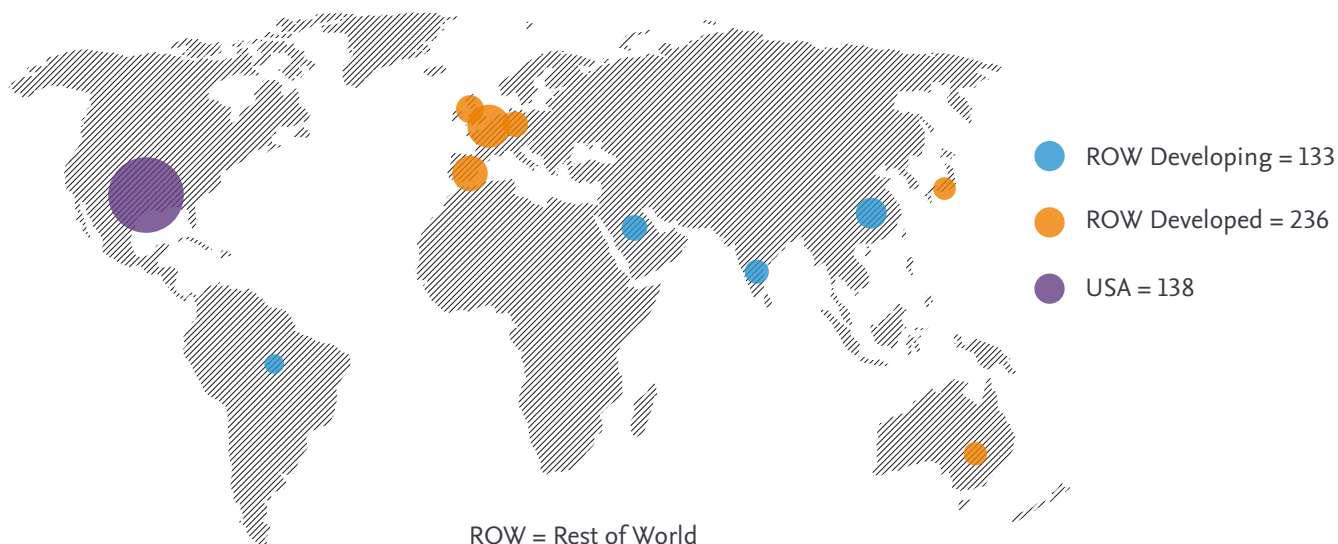
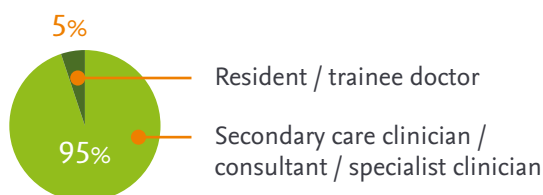
Executive Summary

- The way that clinicians use information is complex and the information they need is varied but there are identifiable commonalities, globally
- We identified six use cases that can be divided into patient-facing and non-patient-facing segments, both which are roughly equal in importance to clinicians across teaching and non-teaching hospitals
- Many clinicians start their search journey across the use cases by looking for answers on PubMed and Google while some revert to sources such as Wikipedia which are not evidence-based
- Value relative to usage is higher for more in-depth non-patient-facing activities, however frequency of usage is highest for patient-facing use cases such as finding quick answers
- Overall, clinicians value patient-facing and non-patient-facing activities equally and require a wide breadth and depth of information to support their day-to-day work



Methodology & Sample

A quantitative survey was completed by 507 international specialist clinicians and residents



Here's what we discovered.

Clinicians use online medical reference information in different ways:



To find a **quick answer** in between or during patient consultations (drug dosing, comorbidities...)



For **learning** purposes (my own learning...)



To **develop or confirm assessment and treatment plan** for a patient (guidelines, trial findings, images...)



For **teaching** purposes (teaching others, preparing lectures, preparing/reviewing exams, presenting to colleagues...)



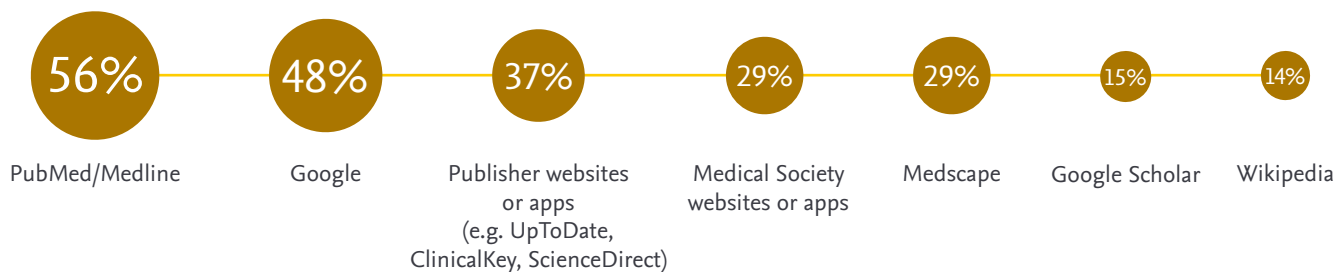
To **keep abreast of the latest thinking** in a field of specialty (latest trial findings, launches, key opinion leader views...)



For **clinical research** (writing articles, developing protocols, for clinical trials...)

Where do clinicians start searches for online medical information?

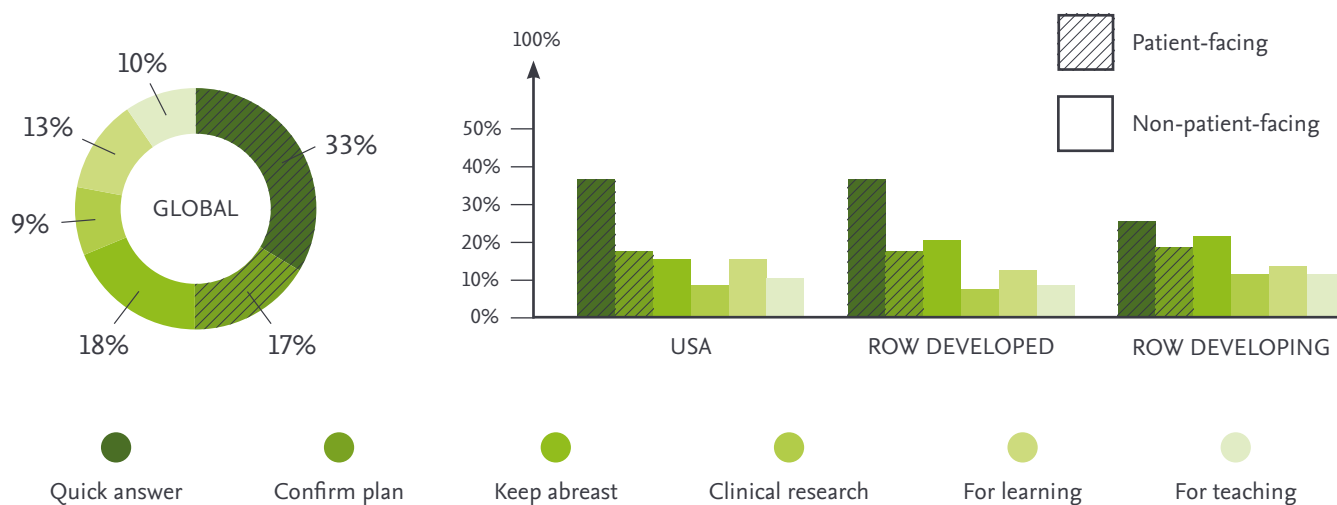
When clinicians look for online medical information across the different use cases, many start their search with free resources such as PubMed and Google. While a wide range of sources are used, some, like Wikipedia are not evidence-based.



* When you are looking for medical information online, where do you most often start your search? Base: All respondents

What is the value of each use case around the world?

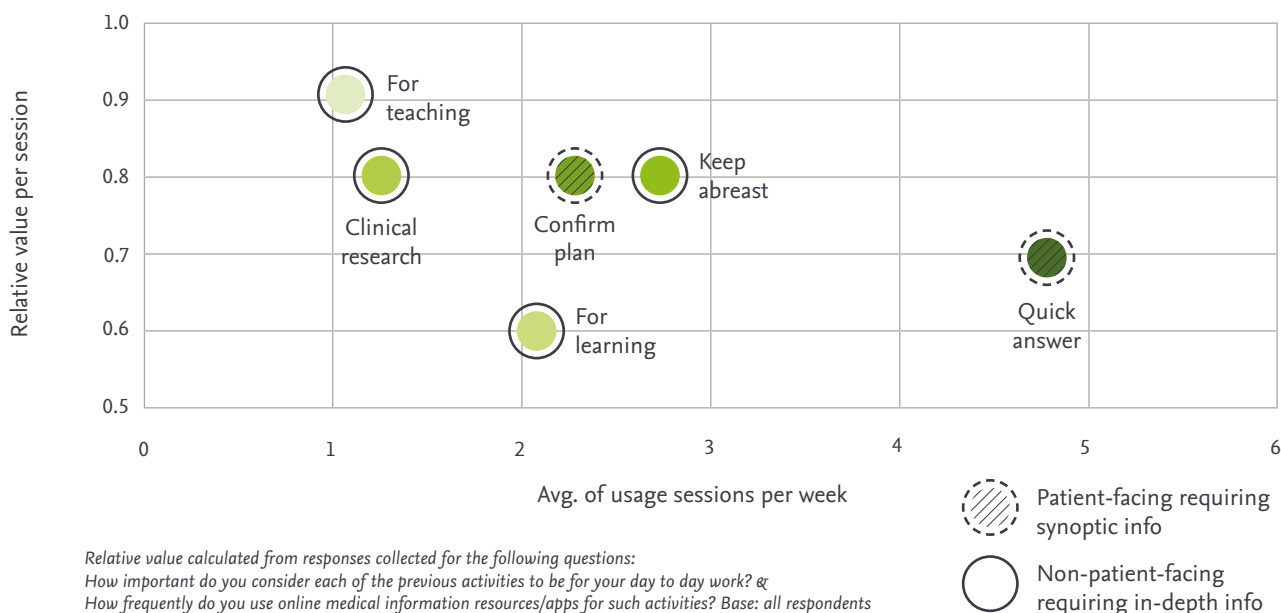
Overall, clinicians attribute equal value to patient-facing and non-patient-facing use cases in the context of their day-to-day work. Clinicians practicing in the US and other developed countries rate the use cases very consistently, whereas those in developing countries put higher overall emphasis on the non-patient-facing use cases. This may be reflective of the higher relative focus on growing clinician numbers, capacity and skills, alongside treating patients.



*How important do you consider each of the previous activities to be for your day to day work? Imagine you have 100 tokens to allocate to each of the activities, based on their importance to you as a professional clinician. You can allocate them equally if they are of equal importance or allocate more or less to an activity if it is more or less important. You must allocate all 100 tokens. Base: all respondents

How often is online medical information used per use case and what is the value per session?

Clinicians use online information resources/apps for both patient-facing and non-patient-facing activities. However, the frequency of use for such activities, the value clinicians ascribe to them and the depth of information they require varies significantly between use cases. In particular, the patient-facing use case of finding quick answers requires more synoptic information and has the highest level of use at on average almost 5 times a week. In contrast, non-patient-facing use cases requiring more in-depth information are used less frequently, however clinicians indicate finding more value for each usage session.



Within each use case, what are clinicians asking for?

Based on the findings highlighted in this study, it is clear that online medical information resources are needed to support clinicians across both their patient-facing and non-patient-facing activities, which they tend to value equally. To get a better view of their search behaviour, we dug deeper to discover the types of information that clinicians look for during these activities. The key takeaways here are the wide breadth and depth of information they require for their day-to-day work and the necessity of online resources that can fulfill these needs.

QUICK ANSWER	
Drug information	71%
Guidelines	66%
Treatment options	66%
Disease / condition overview	55%
Differential diagnosis	46%
Clinical findings	41%

CONFIRM TREATMENT PLAN	
Guidelines	85%
Journal articles	70%
Clinical trial findings	58%
My own institution's protocols	29%
Book chapters	25%
Image libraries / videos	22%

KEEPING ABREAST IN SPECIALTY	
Recent research findings	90%
New techniques / tools / implants	55%
Recent case studies	40%
Topical presentations	35%
Congress proceedings	28%
Thought leader views & blogs	27%

CLINICAL RESEARCH

Articles
PubMed
RESEARCH
Literature
Updates
Clinical trials

FOR LEARNING

Drug dosage
Diagnosis
Presentation
CME
Pathophysiology
Treatment approaches / options
New Techniques
Reviews
Clinical trials
Review articles
GUIDELINES
Latest research / developments
UPDATES
New treatment options

FOR TEACHING

Images
Diagrams
Reviews
Presentation
Case studies
GUIDELINES
ANATOMY
Clinical trials
Latest research / updates

**Thinking of the type of information you need when you need to [USE CASE], please indicate the specific information you look for. Base: All selecting such use case*

In our endeavour to partner with our customers to deliver high quality patient care, we continue to run research studies like this one on a yearly basis to provide insights into the complex and changing ways that clinicians are consuming medical information. We are also continuously looking at ways to address these use cases to better support clinicians with ClinicalKey.

If you would like to learn more about this research, please contact your local Elsevier account manager.

For more information on ClinicalKey please visit elsevier.com/solutions/clinicalkey

