



# *Spotlight Series*

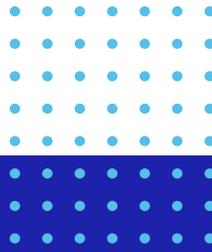
## ***MEDICAL LIBRARIAN: Ensuring Fast, Accurate and Trusted Content for Clinicians***

- Supporting care teams to provide high-quality patient care and to improve clinician and patient experiences
- Addressing interoperability and data barriers for librarians
- Leveraging AI/ML for clinical decision-making
- Empowering other clinical care team members, like nurses and pharmacists, to take a more prominent role
- Q&A with our sponsor Wolters Kluwer Health

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# Enhancing the Clinician Experience: Helping Medical Librarians Support Better Decision-Making and Patient Care

**W**hen considering the effectiveness of clinical care, many point to the important work of clinicians and researchers in improving patient outcomes. But there is one other behind-the-scenes role that is also vital to providing the highest quality care: the medical librarian.

These trusted specialists assist clinicians in their workflow, relying on a host of solutions to provide fast, accurate and up-to-date answers for important clinical questions. When the role first came to prominence nearly one hundred years ago, librarians would push carts of books behind physicians during rounds, offering a “mobile library” so clinicians could look things up “in real time” while reviewing patient charts and treatments. Resource collections have now expanded to the point where this is now impossible, yet the medical library remains a critical extension of the clinical team. And, with the advent of technology resources, they are on call to train physicians to look up the information they need on tables or smart phones or even to quickly pull relevant information when necessary.

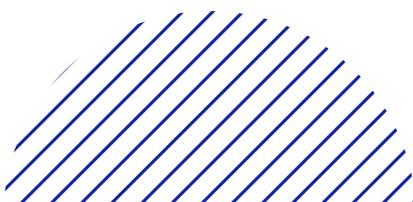
While the last decade’s shift to digital content has continued to change the medical librarians’ traditional role, they remain a crucial resource with the power to improve clinician satisfaction and combat clinician burnout. With emerging technologies like Artificial Intelligence and Machine Learning (AI/ML) coming into their own, medical librarians have new tools and opportunities to help enhance clinical decision-making at the point of care.

More to the point, these new technologies make the need for medical librarians even more critical – clinicians depend on these highly-educated professionals to help them learn what new digital solutions are available and to curate the options that will have most impact. This assistance empowers clinicians to quickly and easily integrate these tools into their practice.

With access to the right digital solutions, medical librarians are in a much stronger position to help clinicians quickly access accurate and trusted content that supports clinical trials and helps them to better diagnose and treat even the most complex patient ailments. However, mergers and acquisitions across the healthcare industry, combined with cuts to medical library budgets and personnel, have made it more challenging for medical librarians to be efficient in their role.

Many healthcare leaders discussing the future of healthcare technology in a post-pandemic world focus on the power of innovation – and how new digital initiatives can help improve both patient and caregiver experiences.<sup>1</sup> While the focus has largely been on enhancing the patient experience, experts consistently agree that digital initiatives should also include creative ways to support clinical decision-making.<sup>2</sup> When technology can find new ways to assist medical librarians and, by extension, the clinicians their work supports, everyone wins.

But as noted in a recent *Healthcare IT News* article, a significant number of healthcare organizations that are currently investing in digital health projects find themselves “stuck in the planning



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and pre-implementation phases” of their digital transformation efforts. They lack the necessary infrastructure to support the projects they seek to implement – and, far too often, they are also struggling with interoperability issues, which interfere with organizations’ ability to access or share data across different digital solutions.<sup>3</sup>

These issues impact medical librarians’ work as well. Without the right foundation in place, in terms of both infrastructure and high-quality data, medical librarians will face significant challenges as they provide clinical decision support (CDS) to clinicians. In addition, scaling digital transformation efforts requires direct business support from Information Technology (IT) departments, not only to provide strict data governance over systems but also to manage the associated cybersecurity risk.

It is imperative that healthcare organizations find ways to support medical librarians so they can continue to serve clinicians, especially since the stakes are rising – and quickly. For example, clinician burnout has skyrocketed across the globe. Between the demands of the COVID-19 pandemic and stressors involving growing workloads and changing requirements in care, clinician exhaustion and burnout are widespread, leading to a high degree of clinician turnover.<sup>4</sup> In fact, the World Health Organization (WHO) projects that, by 2030, there will be a worldwide shortage of 10 million healthcare workers, including doctors, nurses and other medical personnel.<sup>5</sup>

In a recent Commonwealth Fund survey of primary care physicians from 10 high-income countries including the United States, the Netherlands and Australia, more than half of the respondents stated that their workload had increased since the beginning of the COVID-19 pandemic. The percentage of physicians who said their workload had “increased somewhat” or “increased a lot” compared to before COVID-19 numbered 80%

in the Netherlands, 85% in New Zealand, 91% in the United Kingdom, 93% in Germany and 65% in the U.S. Furthermore, younger physicians were more likely to describe their job as stressful, with more than 70% of respondents under the age of 55 in New Zealand, Germany and the United Kingdom stating their work was “very stressful” or “extremely stressful.”<sup>6</sup>

It’s clear that clinicians on the front lines need some relief from increased workloads. Strong CDS tools are one way that healthcare organizations can provide such relief. Medical librarians are uniquely qualified to appropriately vet and deploy useful, accurate and user-friendly CDS solutions.

These solutions can help clinicians better manage their workloads and provide enhanced patient care, which in turn can mitigate burnout and prevent further clinician turnover.

A review of recent news stories shows that progressive healthcare organizations are providing the latest in innovative tools that help medical librarians offer enhanced support to clinicians. Today, hospitals and health systems are deploying technological solutions to access and analyze essential data that can improve diagnosis and treatment decisions – and, as a result, improve patient outcomes. With the right technology in place, medical librarians are even creating CDS tools with the power to benefit healthcare beyond the examination room. Many new digital resources and algorithms also provide support to nurses, pharmacists and allied health workers to ensure that patients are getting the best possible healthcare.

- Despite the fact that many healthcare organizations reported improved margins in late 2022, the Kaufman Hall flash report noted that most hospitals remain in the red, thanks to increased costs. One of the biggest contributors to those costs were staffing shortages, as well as a corresponding

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uptick in labor expenses.<sup>7</sup> This is of concern to medical librarians because, too often, as hospitals look to improve margins, they opt to make cuts to the medical library and associated staff. This is shortsighted, however, as medical librarians are in a prime position to deploy emerging digital tools and technologies to support clinicians and other clinical staff so they can provide the highest quality patient care.

- With polypharmacy, or the simultaneous use of multiple medications to treat various medical conditions, on the rise, Brigham and Women's Hospital is conducting a retrospective study to determine which patients are at greatest risk for adverse drug events. While clinicians are supposed to see all medications within a patient's EHR, that is not always the case. Many patients visit multiple doctors across different facilities, which means clinicians don't always receive vital information about these other treatments that can help them avoid medication contraindications or adverse interactions. The researchers are using algorithms to evaluate senior patients with complex medication regimens and identify those patients at the highest risk for deterioration, hospitalization and increased cost of care due to issues resulting from suboptimal medication regimens.<sup>8</sup> Such tools, when thoroughly vetted by medical librarians, can help streamline clinician workflows – and improve patient outcomes.
- The implementation of AI tools is helping to enhance clinicians' abilities to assess and treat patients with complex medical conditions. A new AI-driven solution assists neurologists in improving outcomes for stroke patients by streamlining workflows and getting patients to treatment more quickly.<sup>9</sup> This is only one of dozens of new digital

solutions leveraging AI to improve CDS. As more AI/ML solutions come to market, medical librarians will need to assess each tool – and ensure their clinicians are getting thoroughly vetted solutions.

- To thrive in the future, healthcare organizations will need to address interoperability “in moments that matter” to overcome data silos with the power to impact healthcare delivery and quality. New advances in digital solutions will require that hospitals are able to support interoperability and agility across their technology ecosystem – including CDS tools.<sup>10</sup> Medical librarians can help organizations determine how to best share data across new and evolving digital solutions – and ensure that the right data is available at the point of care to support clinicians.

To address healthcare's ever-shifting challenges, it is imperative that technology innovators keep the patient at the center of their work. But part of improving the patient experience is making sure that clinicians can more easily access integrated, automated data that can better inform care. This means giving medical librarians the tools they need to support clinicians and other healthcare stakeholders in any situation.

The value proposition for CDS is clear – but only if the tools are useful, accurate and able to enhance both the clinician and patient experiences. When healthcare organizations can overcome interoperability and data-quality issues, they can provide medical librarians with new resources and AI/ML solutions that provide quick and accurate clinical guidance. The result will be better patient outcomes and increased patient satisfaction levels.

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Healthcare is evolving. Ongoing and future digital transformation efforts will change the way healthcare is delivered, especially to the most vulnerable patients. While many digital health investments have focused on the patient experience, healthcare organizations should also prioritize support of medical librarians and their vital role alongside clinicians and researchers.

When hospitals and health systems deploy new, powerful databases and algorithms that support the work of medical librarians, they can significantly enhance clinicians' capabilities

at the point of care. With the right tools in hand, medical librarians can help clinicians provide more accurate diagnoses and treatment for even the most complex patients. Moreover, they can help decrease clinician burnout while streamlining provider-patient encounters. These benefits will not only improve both provider and patient experiences – they will also help hospitals and health systems ensure that they always provide the highest level of care to every patient who walks through their doors.

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# QA

## The Evolving Role of the Medical Librarian

There are many unsung heroes in the healthcare industry. Those ranks include the medical librarian. Historically, these health information professionals have been charged with finding, assessing and sharing important content to help support clinicians and researchers in their daily work. As technology has advanced, however, they now have the responsibility of curating the latest digital solutions available in healthcare – providing invaluable input to clinical decision support tools, in particular.

Medical librarians remain a trusted and crucial resource with the power to enhance clinical decision-making, streamline clinical workflows and improve patient education. Here, Julie Frey, Director, Health Systems Product Strategy at Wolters Kluwer Health, discusses how the role of medical librarians is evolving and how the right tools can help them better support healthcare stakeholders. With a background including product, mergers and acquisitions, and global expansion strategies, in recent years Frey has been focused on developing future concepts for market-leading clinical decision solutions such as Wolters Kluwer evidence-based UpToDate® and UpToDate® Lexidrug™.

### How has the role of the medical librarian changed since the advent of electronic resources? How will it continue to evolve as technology continues to advance in healthcare?

As the medical library, and the resources within it, move from print to a combination of print and electronic formats – with the understanding that everything will eventually move to an electronic format – there are many more resources for clinicians to navigate. They don't know what they don't know. That's one of the reasons the role of the medical librarian has become even more important. It isn't just a matter of aggregating resources that sit in the library or on the web. They also play a pivotal role in training clinicians and students on how to access these resources so they can find what they need when they need it. This is a valuable service to provide – and it's important to have that human element. As technology continues to advance, medical librarians will likely become even more essential since clinicians, in many cases, simply do not have the time to devote to learning what resources are available and how to navigate them in a constantly evolving technology landscape.

### How has the relationship between medical librarians and clinicians changed over time?



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Clinicians have become much more reliant on the medical librarian in many cases. If they have to spend more than a few minutes searching for data or documentation, that's less time they have to devote to the patient in front of them – or to the research publication or to resident training. Every minute counts and clinicians want to spend their time on more productive tasks so they can get their job done, all while avoiding burnout. Clinicians know they can rely on the medical librarian as an extension of themselves – someone to help them with their research. They know the medical librarian is a productivity booster.

### What do medical librarians see as the biggest challenges to supporting clinicians today?

Budget cuts. They significantly impact the technology tools librarians can use, as well as staffing. Cuts to these areas are critical barriers to success. That said, many medical librarians have also mentioned cybersecurity risks as an issue. These risks have greatly increased as resource databases and other tools move into cloud-based and web-based options. There is increased need for the medical library to align with Information Technology (IT) departments to lock down access to these resources more tightly – and that can create challenges for stakeholders, like clinicians, who need to get to that information.

### What tools and technologies can assist them as they address these challenges?

Medical librarians have referenced the need for the best sources with the most current information – and the need to implement multiple resources, including online journals and articles and other tools such as clinical decision support, drug reference resources, and patient education solutions.

### With so many new options emerging, how can medical librarians best vet new technologies to help improve clinician workflows and, by extension, patient care?

All of the medical librarians I've spoken with have referenced the importance of stakeholder buy-in. They need champions, including clinician and faculty users, to garner support for investing in new or replacement technology solutions. They also benefit when they can utilize peer groups and committees to review any new selections to get the user support needed to help those technology implementations move forward.



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