Quick and easy access to evidence-based medical content within ClinicalKey enhances clinical practices

“ClinicalKey’s journals are helping our consultants to make better clinical decisions and improve evidence-based practices for better clinical outcomes.”

Dr Mihir Dalal, Senior Manager of Clinical Administration

Executive Summary

Kokilaben Dhirubhai Ambani Hospital is a large multi-speciality hospital located in Mumbai, India that houses the largest number of intensive care unit beds in the city. Its unique 24-hour specialist system provides patients with round-the-clock access to specialist care. The institution is a leader in clinical practices and early adopter of medical technology. However, its progress was hindered by a mismatch of online medical information subscribed to support physicians' needs, limiting specialists' access to more current and advanced medical information. As a result, physicians resorted to use hard-copy resources or had to buy additional journal articles, costing valuable time and resources.

ClinicalKey, the premium medical database from Elsevier, was introduced to the hospital in late 2012. It gave the hospital full access to a vast library of medical information and multimedia content. Within one month, the hospital saw a significant increase of more than 500 percent in the number of online users, and a 30 times increase in content usage.

The quality and extensive breadth of information addressed the key needs of clinicians in Kokilaben Hospital. The speedy searches allow physicians to have relevant information at their fingertips. Users find that not only are searches much faster than before, but the quality of information is also guaranteed. Evidence-based content is easily available, be it full-text books and journal articles, or images and videos. This creates a profound difference in the way physicians gather and integrate medical information, ultimately leading to improved clinical practices and outcomes. The example of Kokilaben Hospital highlights the promising prospects of ClinicalKey and what it has to offer leading medical institutions.
One of the key differentiators of ClinicalKey is the breadth of content in terms of books, journals, videos, clinics etc. It is really good and our doctors have been finding what they've been looking for and much more.

Dr Mhir Dalal
Senior Manager of Clinical Administration

Situation

Kokilaben Dhirubhai Ambani Hospital is one of India’s largest private hospitals. Situated in the populous city of Mumbai, it is ranked among the top ten multispecialty hospitals in the city. The hospital is well equipped to cope with high patient volumes, with more than 750 inpatient beds and 180 critical care beds.

With an emphasis on excellence in clinical services and research activities, the hospital offers comprehensive quality healthcare services, which incorporates a distinctive 24-hour specialist system that ensures availability and access to specialist care at any time.

The institution also offers post-graduate programs in various specialty areas, including neurosurgery, orthopaedics, paediatric surgery, plastic surgery, and an emergency medicine program that is established in collaboration with a leading academy in the United States.

Kokilaben Hospital is undoubtedly among the finest medical institutions in India, and is at the forefront in terms of adopting medical technologies in order to be a pioneer of evidence-driven medicine in India. However, the previous online medical databases did not fulfil users’ requirements, leading to low adoption and usage rates.

The hospital had three prior online subscriptions, but usage was minimal. Out of 320 physicians in the hospital, only 50 individuals made use of online resources, with downloads averaging only 55 articles a month.

With the previous resources, there was a lack of comprehensive coverage in terms of content types as well as specialty areas. “There were very few e-books for emergency medicine,” commented emergency medicine resident Dr Krushna Patel.

While journals were the main source of clinical reference for physicians, previous subscriptions were limited in terms of the quantity of titles and content depth required for the multi-specialty hospital. Some users thus took substantial time or were unable to find relevant articles through the online resources. Practitioners therefore did not find any advantages in using the online databases, especially since full text articles were not always available online.

As a result, many physicians resorted to sourcing hard-copy resources when they were unable to find suitable information online. These included books from the hospital’s library, supplemented by the purchase of specific journal papers when required. This process was not only more expensive, but also inefficient and resource intensive as it entailed additional processes and support from librarians and the procurement department.

Solution

In late 2012, the hospital turned to Elsevier for an upgrade to its clinical insight engine ClinicalKey.

ClinicalKey offers peer-reviewed and evidence-based medical information which ranges from primary content to expert opinions. It offers 12 types of content, including more than 1,100 books, 600 journals, 2,900 drug monographs, 4,000 medical practice guidelines, as well as MEDLINE abstracts. It also incorporates other Elsevier’s contents – Procedures Consult and First Consult – which contain point-of-care references and expert opinions to support clinical decision making.

In addition to full-text information from books and journals, ClinicalKey includes millions of images and over 13,000 videos which can be shared for teaching presentations or care coordination purposes. Compared to
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the hospital’s prior subscriptions which seldom provided full texts, ClinicalKey allows physicians to be kept abreast of latest clinical research literatures and education materials.

The usage during the one-month trial period was phenomenal, with more than 390 views of articles and e-books. Feedback was overwhelmingly positive, with users praising its quality of information, efficiency as a search engine, ease of use, and extensive breadth of information. This led to the hospital’s purchase of ClinicalKey in December 2012.

Since the adoption of ClinicalKey, usage of online resources has been high; Kokilaben Hospital now sees an average of 280 unique browsing sessions on ClinicalKey per month, more than 5 times prior to the adoption of the product. An average of 1,000 articles are also viewed or downloaded per month. Mr Giridhar Kulkarni, Librarian at Kokilaben Hospital, emphasised that “the users are definitely saving time with faster and more comprehensive searches on ClinicalKey, as well as added features such as a presentation maker and search history.”

For Dr Charudatta Chaudhari, a cosmetic surgeon specialising in microvascular reconstruction, the use of ClinicalKey has been integrated into his daily work. As a powerful knowledge acquisition tool, it lets him download articles for later perusal or for an audio program to narrate the text during his long drives. In fact, this is the equivalent of listening to 6-8 articles a day. Dr Chaudhari acknowledged that this, among other benefits, contributes to immense time savings and convenience.

Dr Patel uses ClinicalKey about 2-3 times a week, particularly during off-duty hours. She spends 3-4 hours each time, finding references on ClinicalKey to support her research for her postgraduate course. “Whenever the residents get time, we definitely go through ClinicalKey. We are all finding it very useful in helping our daily practice.”

Due to ClinicalKey’s superiority as a comprehensive and self-sufficient resource, the institution decided to terminate all other subscriptions. It is considered as the most cost effective resource that the hospital has acquired.

After more than 6 months of usage, Dr Mihir has heard only positive feedback from users in the hospital. “Doctors are definitely happy with the product,” added Mr Giridhar, “I will definitely recommend ClinicalKey.”

Benefits

Substantial time savings

With Elsevier’s proprietary medical taxonomy (EMMeT) and semantic search capability, searches can be done very quickly. “One of the major differentiators of [ClinicalKey] is the faster search,” concurred Dr Mihir.

For Dr Chaudhari, he previously required at least three days to find the information that he needed to prepare for a case prior to a surgery. With ClinicalKey, he said, “I can immediately log on and obtain information. In less than 24 hours, I have all the information ready to best treat the patient.” This amounts to more than 60% in time savings.

User friendly

ClinicalKey allows full-text content to be downloaded and accessed at one’s own time and pace. The downloadable feature makes ClinicalKey’s resources highly accessible, be it online, downloaded or printed content.

Dr Patel particularly endorses this, “It is good because we are able to browse through the books and are able to print out materials for later reference. Either way, we find it very useful.”
CASE STUDY

Trusted information
As all the information within ClinicalKey is evidence-based and peer reviewed, users need not sift through the results when conducting searches. “You have the right information in one place,” said Dr Patel. “That is the best part about ClinicalKey.”

Practitioners have found the Clinics section within ClinicalKey to be particularly useful. The Clinics are a set of comprehensive clinical reviews published by Elsevier, covering subjects such as diagnosis and therapy, new materials and new equipment. Written by leading experts, the Clinics contain authoritative, unbiased coverage of healthcare issues, and have been referenced for various purposes at Kokilaben Hospital, from planning the upgrade of their radiology department to the design of treatment for dermatology patients.

Surgical videos provide quick reference
ClinicalKey provides over 13,000 medical and surgical videos, aiding surgeons in their preparations for procedures. If a patient requires complex next-day surgery, surgeons can simply log into ClinicalKey and view the videos for quick review before they perform the operation.

For instance, videos from ClinicalKey regarding brachial reconstruction have been particularly useful for Dr Chaudhari and his team of head-neck cosmetic surgeons.

Improved clinical practices and outcomes
Due to its depth of information and easy accessibility, clinicians are able to better self-educate and improve their own practices and techniques.

“Clinical outcomes are difficult to quantify, but as clinicians, we know that with ClinicalKey we can care better for the patients,” said Dr Chaudhari. His statement parallels Dr Patel’s sentiments – “ClinicalKey has an impact on clinical outcomes, because we use the information to provide better patient care.”

For residents who are still learning the ropes, ClinicalKey is also extremely useful in improving physicians’ clinical and diagnostic techniques. In the emergency medicine department, due to the nature of the job, Dr Patel uses ClinicalKey “retrospectively rather than simultaneously, to go through what they could have done better, and what should not have been done.” She gave the example of a patient who arrived in the emergency department with breathing difficulties, and who was finally diagnosed with pulmonary oedema. She later looked up related articles in ClinicalKey and was able to correlate what she practiced with what was in the literature.

Using ClinicalKey as a practical learning aid benefited residents with continuous improvement of techniques and theoretical knowledge, minimising the chances of future errors or delays.

Conclusion
ClinicalKey has significantly impacted the way physicians access reliable, high quality content across a wide range of specialties at Kokilaben Hospital. The tool clearly facilitates time savings for clinical research and drives better treatment decisions. Through a single resource repository, clinicians have quick full text access to peer-reviewed and evidence-based content, as well as a variety of multimedia content, at their fingertips. This dynamic clinical resource has undoubtedly proven to be a valuable tool for the renowned Indian hospital to provide better evidence-based clinical care.