CLIENT PROFILE: FROEDTERT AND THE MEDICAL COLLEGE OF WISCONSIN

In order to serve the informational needs of the clinicians and instructors at its three hospitals, affiliated medical school, and anticipated new pharmacy school, Froedtert and the Medical College of Wisconsin health system needed an extensive and multi-faceted drug information solution covering electronic drug references, EMR-integrated drug data, and formulary management.

What if the health system could find all the medication decision support it needed in one place?

A long-time user of Medi-Span® drug data from Wolters Kluwer Clinical Drug Information, Froedtert added Lexicomp® drug references in 2014, giving the health system access to a broad spectrum of solutions all developed to work together by the Clinical Drug Information team.

Medication utilization coordinator at Froedtert’s Center for Medication Utilization, Megan Holsopple, PharmD, says that Froedtert chose to switch to Lexicomp after evaluating multiple competitors “to streamline integration,” as well as because of “the depth of the databases.” By using a full suite of Wolters Kluwer Clinical Drug Information's “seamless” solutions, Froedtert was able to consolidate many products and services. The institution “got rid of separate subscriptions and optimized our formulary,” she explains.

Lexicomp online drug reference and Medi-Span drug data are developed by the same content team at Wolters Kluwer Clinical Drug Information and are designed to be complementary resources. “Whenever you’re in a large health system, you’re trying to align information and resources,” Holsopple says. “It’s nice to have the same systems talking to each other for consistency of information.”

“We definitely view that as a benefit,” adds Amy Schuler, Froedtert’s pharmacy informatics senior systems analyst, who maintains the Medi-Span data and Lexicomp integration within the health system’s Epic® EMR system. “We like being able to rely on the information coming from the same source.”

THE ADVANTAGES OF SWITCHING TO LEXICOMP

Froedtert switched all three hospitals and all 27 outpatient physician affiliates across its enterprise over to Lexicomp after choosing it over its previous electronic drug information reference resource. “Prior to Lexicomp implementation, we worked with the (Wolters Kluwer) sales staff for six months before implementation,” Holsopple says “We gave clinicians time to experiment with the product. Everyone was really receptive.”

In its first 10 months of access to Lexicomp, Froedtert’s usage numbers grew from 80,000 uses a month to 122,000 a month.
When comparing drug information databases, Holsopple saw several clear advantages to choosing Lexicomp over Froedtert’s previous resource. “The depth of knowledge, timely updates, and how concise it is. All of these factors definitely make Lexicomp a high-quality resource. Plus, we saw $180,000 in cost savings, which made it a great value and fiscally more responsible.”

**CUSTOM FORMULARY DATABASE YIELDS BIG IMPROVEMENTS**

Along with its subscription to Lexicomp, Froedtert chose to add FORMULINK, the Lexicomp custom formulary database service. Prior to FORMULINK, Froedtert relied on a “homegrown” formulary database staff had created themselves, Holsopple says. The database was also not accessible on the multitude of platforms accessed by clinical staff across the enterprise.

“Lexicomp made (our formulary) universal,” she says. “It helps us promote proper therapeutic use of medications that translate into fiscally responsible medication spend.”

With FORMULINK, Froedtert was able to create its own customized database within Lexicomp, allowing clinicians to instantly ascertain from a single search whether a medication is on the health system’s formulary and to access valuable dosing and administration information, precautions, and customized internal medication use information.

FORMULINK enables Froedtert to include its hospital policies, guidelines, historical P&T tracking, and links to hospital intranet resources within drug monographs, fully integrated with Lexicomp drug information.

Froedtert performed staff surveys to assess the use of its formulary resources before and after implementing Lexicomp and FORMULINK. The graphic below shows the results revealed significant improvements after implementing FORMULINK.

**Significant Improvements after Implementing FORMULINK***

- **37%** increase in staff satisfaction
- **40%** increase in user ability to find information quickly
- **250%** increase in formulary usage in the first 5 months
BUILDING A DATABASE

Working alongside a Lexicomp project manager, Holsopple was able to create the initial formulary database and receive ongoing support. Froedtert’s dedicated Clinical Drug Information specialist “has been very responsive and empowered us to be able to make (the database) our own.”

That ownership stems from Holsopple having the ability to oversee maintenance of Froedtert’s custom formulary database herself, using the Lexicomp Information Management System (LIMS) editing tool to make her own modifications and additions to the database and publish them instantly. “LIMS is so easy to use. It’s nice to have the real-time ability to make changes,” she says.

EMR INTEGRATION ENHANCES EFFICIENCY

Froedtert has taken advantage of the strong relationship between Wolters Kluwer Clinical Drug Information and Epic, using Medi-Span drug data as the backbone of its EMR clinical screening functions and integrating direct links to Lexicomp drug reference content in its Medication Administration Record (MAR) and Computerized Prescriber Order Entry (CPOE).

Medi-Span data has been a fixture at Froedtert since it first implemented its Epic EMR in 2004. “The volume of information in Medi-Span – if we had to put that in manually, it would be an unbelievable undertaking,” says pharmacy informatics specialist Schuler, who handles the Medi-Span monthly data load update.

Alert fatigue is always a concern when dealing with drug data and clinical screening. Froedtert overhauled its alert settings multiple times as it added new components to its Epic system. To help balance clinicians’ needs to see the most meaningful alerts with their simultaneous desire to not be

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Megan Holsopple, PharmD, Medication Utilization Coordinator, Center for Medication Utilization, Froedtert and the Medical College of Wisconsin

Lexicomp + UpToDate: The ultimate clinical decision support

Froedtert subscribes to both Lexicomp and UpToDate®, the evidence-based, physician-focused clinical decision support resource also from Wolters Kluwer. This gives Froedtert the ability to link directly from disease topics in UpToDate to the related drug therapy information in Lexicomp or to access UpToDate searches from the blue tool bar atop every page of Lexicomp. Together, these two resources combine to create a panoramic view of clinical decision support, providing clinicians with a greater depth and breadth of information conveniently linked into one workflow to promote efficiency at the point of care. As affiliated Wolters Kluwer solutions, Lexicomp and UpToDate are designed in concert, which also helps assure that content will be aligned and complementary across both resources.

Froedtert has observed another advantage, Holsopple reports: collaboration. The ability to easily “toggle back and forth between both databases” has helped pharmacists connect to disease state knowledge and physicians and allied health staff to delve deeper into pharmacology. This has enhanced communication between the hospital and the pharmacy, she says, helping to get clinicians on the same page.

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overwhelmed by too many alerts, Froedtert is again going through a “major overhaul,” Schuler reports. She works directly with Epic and Medi-Span implementation specialists on developing system-wide filter settings that help increase the number of relevant alerts and decrease the amount of “noise” from nuisance alerts. Medi-Span provides a variety of filtering recommendations aimed at achieving higher clinician satisfaction without sacrificing patient safety.

In addition to Medi-Span data, having links to Lexicomp references integrated in Froedtert’s Epic EMR system has made reaching valuable drug content “easy,” says pharmacist Holsopple. “We use links from the patient MAR directly to what we need in Lexicomp. That wasn’t always the case with (other drug references). We used to have to go out to a database and look up a drug.”

When Froedtert launched Lexicomp and its FORMULINK custom database in 2014, Schuler was tasked with establishing the Epic medication literature linking and maintaining monthly updates of records. She says she found the Lexicomp documentation “spot-on” and appreciated that it was Epic-specific.

Lexicomp linking “was extremely easy to implement,” Schuler says. “It was simple to set up, and the support was great. We had several direct contacts (at Wolters Kluwer Clinical Drug Information) we could email or call, and the response was quick.”

Overall, the implementation of this full suite of Clinical Drug Information solutions – including Lexicomp reference, Medi-Span data, and the custom formulary database – has assisted Froedtert in achieving several important goals, Holsopple says: “It’s a platform to improve transparency and accessibility of information that has enabled us to streamline access to point-of-care guidance and improve safe medication practice.”

Froedtert clinicians’ favorite Lexicomp features:

- The nursing staff “absolutely loves” the HCAHPS Considerations field in drug monographs, which provides verbatim language of questions asked in the nationally required Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient satisfaction survey.

- Staff members have been vocal about the 19 language options for medication education patient handouts being a vast improvement over previous resources.

- Within the Lexicomp interface, healthcare professionals can also access the AHFS Drug Information® in-depth database when needed.

- Martindale add-on module provides multinational drug information, to help clinicians treat Froedtert’s large international population.

- The Drug Plans add-on module gives clinicians and Froedtert’s Prior Authorization team access to insurance formulary information on more than 5,500 drug plans and saves time at discharge.

- Froedtert is affiliated with the Medical College of Wisconsin, where students have found Lexicomp valuable for performing Medication-use Evaluations (MUEs) and Drug-use Evaluations (DUEs).


Froedtert & the Medical College of Wisconsin regional health network delivers highly coordinated, cost-effective healthcare to residents of southeastern Wisconsin and beyond. It is made up of Froedtert Hospital, Milwaukee; Community Memorial Hospital, Menomonee Falls; St. Joseph’s Hospital, West Bend; and more than 25 primary and specialty care health centers and clinics. The network’s three hospitals have 781 staffed beds, nearly 40,000 annual admissions, and more than 900,000 annual outpatient visits. www.froedtert.com

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