

Using LEAP, Saudi laboratory attains accreditation

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July 2024—Earlier this year the laboratory at King Salman Armed Forces Hospital joined more than 120 other Saudi labs in achieving CAP accreditation. And it did so with a boost from LEAP.

The 665-bed hospital needed to adopt standards for nearly all technical specialties and comply with more than 1,000 CAP requirements. And laboratory director Maj. Sultan Al-Hawatti made it clear at the outset that he had no interest in gaining CAP accreditation merely to create a paper tiger. Therefore, the laboratory reached out to Raafat Elshimy, MT, health care solutions and quality manager at Siemens Healthineers. King Salman hospital is a Siemens customer, and laboratory management knew that the vendor had entered a partnership for LEAP (Laboratory Education and Accreditation Program) software with the College of American Pathologists and the Japanese company CGI.

CGI developed LEAP as a tool to help laboratories meet the requirements of CAP accreditation. It is a cloud-based system that combines project management, education, document management, and samples and templates for laboratory processes.

LEAP comes with the entire CAP checklist catalog preloaded and CAP requirements organized into logical groupings called families of standards in LEAP. CAP checklists are used in FOS-based projects to create policies that address laboratory processes, education, and maintenance. A laboratory creates a FOS following a five-step process.

1. Develop policies and procedures using the templates provided.
2. Have all stakeholders review and confirm policies and procedures.
3. Create or confirm a budget for implementing procedures.
4. Assign a team to ensure standards are being maintained and establish intervals for tracking compliance.
5. Have management review and approve the entire process as described in the FOS.

Once the laboratory director or a designee approves the FOS, LEAP automatically creates a master evidence folder to store all documents related to the standard and the FOS goes live. It is displayed on LEAP's quality management system dashboard as a completed project.

LEAP then assigns confirmation tasks to the appropriate personnel to ensure ongoing maintenance. If these employees do not perform a task or do not upload evidence that it was completed or reference the location of the evidence, the designated manager is notified. Furthermore, LEAP provides a graphical depiction of performance over time, highlighting the compliance percentage for each laboratory department.



Recognizing CAP accreditation of the King Salman Armed Forces Hospital laboratory are (from left) Lisa Stempak, MD; Randa Al-Shaman, MT; Richard Scanlan, MD; Maj. Gen. Saad Saleh Al Ghamdi, MD; Robert Baisden, MD; Julie Colby, MS; Kanta Watanabe; Amjad Khan, MD; and Raafat Abdelhady Farag Elshimy, MT.

LEAP also has self-audit functionality, which allows King Salman hospital to trigger a self-audit for the entire laboratory, a single department, or a single FOS. The software guides project stakeholders through a procedure that verifies process integrity. When changes are needed, it reinstates the aforementioned five-step process.

The LEAP dashboard displays compliance status at a glance. This allowed King Salman hospital to quickly identify which standards were out of compliance and which employees were responsible for those standards. New or modified CAP requirements are displayed on the dashboard with new samples, templates, and implementation tips. The dashboard also links to My Tasks, a customized page for each QMS stakeholder that delineates that person's responsibilities and deadlines and provides overviews of project status.

LEAP's CAPA (Corrections and Preventive Actions) system, called CAPAct, allows laboratory managers to input nonconformities, assign tasks, and resolve nonconformity issues via such methods as description, investigation, root-cause analysis, resolution planning, or confirmation. The dashboard-enabled tool provides a system of checks and balances.

During its CAP inspection, the King Salman laboratory was able to provide evidence of compliance by searching via department, keyword, or CAP requirement number. The inspection team, led by CAP commissioners Robert Baisden, MD, and Richard Scanlan, MD (chair of the Council on Accreditation), and CoA committee chair Lisa Stempak, MD, pinpointed several deficiencies and the laboratory rectified all of them prior to accreditation.

While the King Salman laboratory's assessment of LEAP is largely favorable, end users reported that it would be helpful if the product provided a more dynamic and collaborative process for creating policies and procedures in the first step of the five-step process, instead of having to upload and download documents to make changes. Furthermore, they noted that evidence of compliance must be uploaded via computer, scanner, or phone, a tedious process for busy laboratorians.

LEAP's FOS structure is best suited to laboratories that have not yet undergone CAP accreditation. CAP- or ISO-accredited labs that want to use LEAP must adapt their existing systems to fit into the FOS structure as custom files or begin anew using LEAP templates, an option that may be easier, faster, and more effective.

During a one-and-a-half-year span, King Salman hospital worked through the five-step process for more than 200 FOS, a time-consuming commitment that, in the end, provided rewarding results.

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