# Newsbytes, 10/15


## Raymond D. Aller, MD, and Hal Weiner




## A decade later, online laboratory handbook gets makeover

Ten years ago, when Massachusetts General Hospital created an online laboratory handbook, the event crowned many hours of programming and coding by a team of pathologists, who were convinced their labors would dramatically streamline access to information.

Although a large step forward, this online manual pales in comparison to a much more sophisticated repository of knowledge released this past summer, says Anand S. Dighe, MD, PhD, director of Massachusetts General's core laboratory and a developer of the original online handbook.

Created via a collaborative effort between an internal software development team and an information technology consultant, the completely revised handbook has a robust underlying infrastructure. It's designed to manage laboratory testing knowledge across Partners HealthCare, a network of nine hospitals, including MGH, and other health care entities in the Boston area.

The new handbook features a stronger foundation of knowledge, fed by a back-end knowledge repository that includes information from the health system's Sunquest lab information system, site-specific knowledge databases, and Epic electronic health record, says Jason Baron, MD, medical director of the core laboratory at Massachusetts General. The knowledge base also includes information on tests performed outside the hospital's lab. "Clinicians are able to view recommendations for the various esoteric tests, and we provide links to the reference laboratory website for further information," Dr. Baron adds.

The new handbook also formalizes and tracks database changes, allowing updates to be evaluated and more easily corrected if necessary. "Before, we had a database that could be manually updated by authorized users, and the changes would simply show up in the handbook, without an audit trail," says Dr. Dighe. "In a multisite environment of nine hospitals, that would be a recipe for disaster. We needed to ensure that we have standardized entry of test information and an audit trail for all changes."

Unlike its forerunner, which was designed to be accessed from a personal computer, the new manual can be viewed easily from any type of electronic device. "Our new handbook uses a responsive design approach to enable it to work well with the browser of any Windows, Android, or Apple OS device," Dr. Dighe explains.

Having many more data fields than its predecessor, the new lab manual is also versatile, allowing information to be displayed in different ways depending on the category of user, whether clinician or laboratory staff, and the type of test.

“We hope to expand the laboratory handbook by repurposing the core data from the knowledge repository for a variety of applications,” says Dr. Baron. “For example, we would eventually like to create a patient-friendly version of the handbook to help patients understand their test results. Patient-centered data may become increasingly useful as patients more regularly access their test results through secure portals.”

To drive traffic to the original online manual, Dr. Dighe and his team relied heavily on links from Massachusetts General’s website, as well as email and word-of-mouth publicity. In contrast, clinicians can’t miss the new manual because it’s integrated into the health network’s EHR system. “Whenever physicians are about to order a test through Epic, they have a link from the Epic order page to our lab handbook,” Dr. Dighe says.

Massachusetts General’s core laboratory continues to maintain a call center to field questions about various tests, staffed by employees who may now use the online lab handbook to find the answers. However, with the new manual, Dr. Dighe hopes to convert many of those phone calls to Web requests. “We know from experience that if our Web-based information is up to date, available, and complete, we can avoid time-consuming phone calls to the laboratory,” he says.

Having spent long hours writing code for the original online handbook, Dr. Dighe has learned a valuable lesson. “Don’t do it all yourself,” he advises. “Find a professional developer. It was actually relatively inexpensive to hire a consultant to help build our new lab handbook, and the product we have now is vastly superior to what we had before.” *—Carolyn Schierhorn*

## ONC offers tool to address health IT product complaints

The federal Office of the National Coordinator recently launched a reporting mechanism that allows users of health care technology to register complaints about certified products.

“The new reporting mechanism [www.healthit.gov/healthitcomplaints] will help us here at ONC better triage, track, route, and respond to your health IT concerns or challenges,” John White, MD, acting deputy national coordinator, posted on the ONC’s website.

The agency recommends that an entity first contact the developer or marketer of its health care information technology product to address problems. “If that doesn’t work,” Dr. White added, “and you think the issue relates to the product’s certified capability, then you should contact the ONC-Authorized Certification Body….But if the issue remains unresolved, please submit your issues to ONC.”

The agency encourages health IT users to contact the ONC via the new complaint form if they experience challenges that appear to be related to health information blocking; if they cannot receive or share health information; if they are concerned about the usability of their electronic health record system or the safety of a product; or if the certified capabilities of their product are not performing as expected.

“While we may not always have the ability to step in and fix the problem,” wrote Dr. White, “we may be able to help in other ways, such as beginning a dialogue between you and your vendor/developer. Submitting your concerns to us also helps us better understand the extent and nature of potential problems so we can more accurately represent them to Congress and our federal partners and work with them to develop solutions.”

## CMS sets up center to tackle ICD-10 issues

The Centers for Medicare and Medicaid Services has established an ICD-10 Coordination Center, based in Baltimore.

The center will “be responsible for managing and triaging [ICD-10] issues and ensuring timely communications with all of you and with me in how we are doing,” CMS acting administrator Andy Slavitt said during an ICD-10 forum in late August.

William Rogers, MD, an emergency room physician and director of CMS' Physician Regulatory Issues Team, heads the coordination center as the ICD-10 ombudsman. In that capacity, Dr. Williams addresses health care professionals' questions and concerns related to the mandatory switch to the medical coding system, which occurred on Oct. 1.

Dr. Rogers, Slavitt said at the forum, will be "your internal advocate inside CMS" and should be contacted via the email address icd10_ombudsman@cms.hhs.gov.

## Bio-Rad Laboratories releases risk-management software

Bio-Rad Laboratories has introduced Bio-Rad Mission: Control risk-management software to quantify a laboratory's risk tolerance.

The product is designed to help laboratories identify the best quality control rules and QC frequency for developing a customized QC strategy to report patient test results to clinicians.

"With Bio-Rad Mission: Control," says Maxfield Williams, Bio-Rad's director of Global Marketing, Quality Systems, "laboratories can now reduce the risk of reporting incorrect results to the physician and, ultimately, to the patient by establishing a QC plan that is consistent with the CLSI EP23-A guideline."
***Bio-Rad Laboratories**, 800-224-6723*

## Foundation Medicine unveils genomics software

Foundation Medicine has expanded its suite of molecular information-based products with its GeneKit cloud-based genomics software.

Using Foundation Medicine's FoundationCore knowledge base of more than 50,000 genomic profiles, GeneKit facilitates the interpretation of genomic data generated by pathologists from targeted next-generation sequencing and "hot spot" assays.

"GeneKit will allow pathologists to assess a patient's specific tumor alterations against a knowledge base of curated genomic variants, relevant specific research, targeted therapy, and clinical trial information, enabling the creation of actionable reports in a timely fashion for care teams," says David J. Daly, chief commercial officer for Foundation Medicine.

GeneKit integrates with any NGS assay that interrogates the variant status of up to 50 cancer-related genes known to be involved in the development, progression, or treatment of cancers. It organizes and reports information on up to 50 genes using data from FoundationCore, as well as customers' proprietary data. The software offers customized reporting options.
***Foundation Medicine**, 888-988-3639*

## Glencoe Software introduces digital pathology product

Glencoe Software has launched PathViewer, a tool for viewing, annotating, sharing, and managing digital pathology images.

The Web browser-based, platform-agnostic software ensures that, regardless of the scanner used for acquisition or the data format, the digital pathology images are securely stored in their original format.

PathViewer uses Bio-Formats scientific image-translation software. It operates seamlessly with the Omero Plus data-management system from Glencoe Software or the open-source Omero data-management platform from the Open Microscopy Environment.

***Glencoe Software***, *206-973-8025*

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