

# Management

## BULLETIN

### Going Paperless...To Be or Not to Be?

Traditional laboratories were filled with file cabinets, folders, shelves and notebooks. These items took up a lot of space and required staff time to organize as retention times were exhausted and older files were replaced with newer ones. Then came along the computer, email, scanner, fax machine, pdf documents and electronic signatures. As technological advances are made every day, laboratorians get excited about the idea of going paperless.

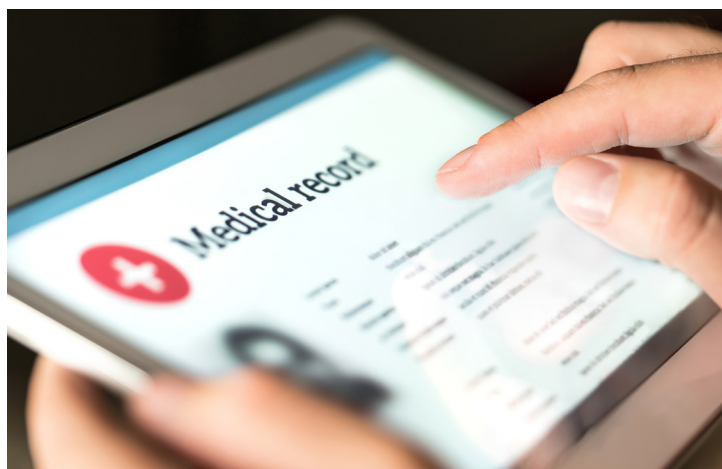
#### What is Paperless?

A paperless environment is one where the use of paper is eliminated or greatly reduced by converting documents to a digital form, recording or relaying information by electronic media rather than on paper. It obviously saves space and benefits the environment by reducing paper manufacturing. The paperless lab concept has been talked about off and on for many years. But is it the best thing for your laboratory?

#### The Electronic Medical Record (EMR)

To realize the digital dream, it is important to understand what a successful paperless lab would look like and what it should achieve. It is also important to understand what a paperless lab is not., We simply cannot replace our paper notebooks with electronic records and call it a day.

The Electronic Medical Record (EMR) refers to a computerized record of patient data. Shifting to an EMR from a paper-based system is widely expected to improve the efficiency, quality, and safety of medical care. However, EMRs are not always complete when implemented. Paper often fills the gaps.



Now, let's talk about downtime. There must be a plan to keep the laboratory running and results recorded without the EMR. Paper back-up processes are essential to ensure continuity of care and avoid lapses in care during system downtime, whether expected or unexpected.

#### Communication

Labs should be able communicate with other businesses and individuals, not just with those in-house. Electronic communication requires both the sender and the recipient to have easy access to appropriate software and hardware.

## Regulation Issues

Upon review of the Code of Federal Regulations (CFR 42, Chapter IV, Subchapter G), two standards can be identified as issues in paperless laboratories.

### 1. Part 493.1241 Standard: Test Request.

(e) *If the laboratory transcribes or enters test requisition or authorization information into a record system or a laboratory information system, the laboratory must ensure the information is transcribed or entered accurately.*

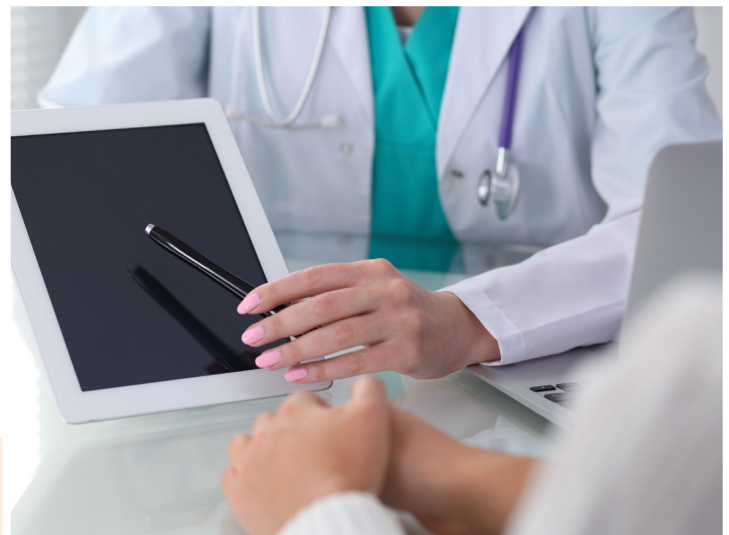
### 2. Part 493.1242 Standard: Specimen submission, handling, and referral.

(b) *the laboratory must document the date and time it receives a specimen.*

These regulations can sometimes be difficult to follow when a laboratory does not have a system in place to verify the information entered in the EMR. Many small volume systems do not have an easy way to document date and time of specimen receipt.

## What's the Answer?

Going paperless is not as easy as it sounds. There are many variables to consider, including EMR downtime plans, communicating with other medical professionals, and most importantly, federal regulations. Any human activity is inherently prone to errors to some degree. There must be a system in place to find those errors and make necessary corrections.



## References:

Dykstra, Richard H., M.D., M.S., Joan S. Ash, Ph.D., Emily Campbell, R.N., M.S., Dean F. Sittig, Ph.D., Ken Guappone, M.D., Ph.D., James Carpenter, R.Ph., M.S., Joshua Richardson, M.S., M.L.I.S., Adam Wright, Ph.D., Carmit McMullen, Ph.D, [www.researchgate.net/publication/42639695\\_Persistent\\_Paper\\_The\\_Myth\\_of\\_Going\\_Paperless](http://www.researchgate.net/publication/42639695_Persistent_Paper_The_Myth_of_Going_Paperless) Annual Symposium Proceedings/AMIA Symposium, November 2009, Accessed 7/8/2020.

McGibbon, Graham, [The Quest for the Successful Paperless Lab: Can We Overcome the Challenges?](https://blog.acdlabs.com/acdlabs/2016/06/the-quest-for-the-successful-paperless-lab-can-we-overcome-the-challenges.html) <https://blog.acdlabs.com/acdlabs/2016/06/the-quest-for-the-successful-paperless-lab-can-we-overcome-the-challenges.html> published 6/30/16, Accessed 7/8/2020.

Meek, Trish, “Delivering the Paperless Lab Environment – A Game Changer”, [Insights on Data Management Systems](http://www.labmanager.com/insights/delivering-the-paperless-lab-environment-a-game-changer-16188), [www.labmanager.com/insights/delivering-the-paperless-lab-environment-a-game-changer-16188](http://www.labmanager.com/insights/delivering-the-paperless-lab-environment-a-game-changer-16188), August 2012, Accessed 7/8/2020.

[https://en.wikipedia.org/wiki/Paperless\\_office](https://en.wikipedia.org/wiki/Paperless_office) Accessed 8/18/2020

“Paperless.” [Merriam-Webster.com Dictionary](http://www.merriam-webster.com/dictionary/paperless), Merriam-Webster, [www.merriam-webster.com/dictionary/paperless](http://www.merriam-webster.com/dictionary/paperless) Accessed 8/18/2020.

Code of Federal Regulations, <https://ecfr.federalregister.gov/current/title-42/chapter-IV/subchapter-G/part-493?toc=1> Accessed 8/18/2020.

■ Submitted by: Karen Wall, BSMT (ASCP)

