

# Impact

Private Practice  
Section of the  
American Physical  
Therapy Association



## Don't Hate It. Automate It!

How to love your workflow.

By Jeremy Cader

---

### About the Author

Jeremy Cader is Vice President of Product, IT, and Engineering at Clinicient, which helps outpatient rehabilitation therapy businesses automate their workflow with a combination of cloud-based EMR, practice management, and revenue cycle management (RCM) solutions that optimize the entire care cycle from patient to payment. He can be reached at [jcader@clinicient.com](mailto:jcader@clinicient.com).

---

Copyright © 2016 American Physical Therapy Association. All rights reserved.

Reprinted from Jeremy Cader's, *Don't Hate It. Automate It!*, Impact Magazine, February 2016, page 43, with permission of the American Physical Therapy Association. This material is copyrighted, and any further reproduction or distribution is prohibited.

**Before Thomas Edison invented an economical electric light bulb in 1878,** a long list of manual tasks had to be completed to produce indoor lighting.

First someone had to fit a wick into a burner sleeve. Then they had to trim the wick, fill the lamp with kerosene, attach the burner, and soak the wick for 10 minutes. On and on, the manual steps piled up until a flame was finally ignited and light flickered around the room.

Drawing on his background as an electrical engineer, Edison eliminated these burdensome steps with cost affordable automation in one simple action: a tap of a switch. Within milliseconds, a space was illuminated!

Since then, humans have automated innumerable manually intensive tasks. Henry Ford made land transportation as easy as starting an engine. Martin Cooper redefined communication with the mobile phone. Dr. Maria Telkes used technology to instantaneously heat a home with solar power.

Over the past century, nearly all industries have used human collaboration and technology to better orchestrate repeatable patterns of business activity. In market after market, automation has decreased costs, minimized time to payment, and improved quality. Unfortunately, health care has fallen behind.

### Buried Under Manual Administrative Tasks

It is surprising that manual administrative tasks are still entrenched in health care. Theoretically, the widespread adoption of electronic health records should make delivering all forms of care significantly easier. Calling up a patient's current benefits should be a click away and submitting clean claims should require a minuscule amount of a therapist's time. In any setting, the process of sharing clinical and financial information with payers, providers, and patients should be the least time-consuming part of a therapist's day. Unfortunately, it is often the most burdensome.

Interested in learning more? Contact us for a free consultation.  
Call 866.706.0397 Visit [clinicient.com](http://clinicient.com) Email [info@clinicient.com](mailto:info@clinicient.com)



# Don't Hate It. Automate It!

By Jeremy Cader

Nearly every other industry has modernized arduous manual processes. So why are more private practices not automating the plethora of practice operations that often impede efficiency and care delivery? Why is health care so far behind?

I spent the first few decades of my career studying ways to strategically engage humans with technology in order to reduce manual effort. Fortunately, the technology and tools exist. Human workflow services tools have been around for decades, such as BonitaSoft BPM, Ultimus, and IBM BPM. When paired with the right process improvement methodology, automation has the capability to truly modernize society.

A variety of methodologies are available to meaningfully apply technology automation. These include Six Sigma, Lean Management, Lean Six Sigma, Agile Management, Re-engineering, Total Quality Management, Just-In-Time, Kaizen, Hoshin Planning, Poka-Yoka, Design of Experiments, and Process Excellence. To optimize existing processes, I have experienced repeated success using the Lean Six Sigma approach. Grounded in measurement and statistical rigor, it improves performance by systematically documenting processes, identifying pain points, and reducing waste.

## A Perfect Match for Physical Therapy: Process Automation Technology and Lean Six Sigma Methodology

Used for decades to streamline processes and reduce defects in manufacturing, the Lean Six Sigma approach is favored by health care leaders for process improvement because it does not force organizations to choose between quality of care and saving money. Instead, its application in health care requires an understanding of how the tools and methodologies translate to the people-intensive processes of patient care. Once applied, the possibilities are endless.

For example, using Lean Six Sigma, Morton Plant Hospital in Clearwater, Florida, improved patient

satisfaction over 50 percent, reduced emergency department length of service by 21 percent, and recovered over \$4 million in cost of quality.<sup>1</sup> Yale-New Haven Medical Center in Connecticut achieved a 75 percent reduction in bloodstream infection rates in the Surgical Intensive Care Unit, with \$1.2 million annually in estimated savings.<sup>2</sup>

---

In order to automate the administrative tasks involved in the delivery of physical therapy and improve performance with new methodologies like Lean Six Sigma, clinical and financial information must flow seamlessly regardless of geographic, organizational, or vendor boundaries.

---

However, unlike other industries, a few unique obstacles have impeded the widespread adoption of Lean Six Sigma and process automation technology in health care. These impediments must be removed quickly as an aging U.S. population will soon outgrow the scalable business administration and information-sharing capabilities of most providers—particularly physical therapists.

## Process Automation Enemy No. 1: Data Siloes

One of the biggest obstacles to automating health care's information and business processes is the lack of interoperability between most information technology systems.

System compatibility, or interoperability, refers to an information system's ability to connect with other systems. The Institute for Electrical and Electronics Engineering defines interoperability as "the ability of two or more systems or components to exchange information and to use the information that has been exchanged."<sup>3</sup>

In order to automate the administrative tasks involved in the delivery of physical therapy and improve performance with new methodologies like Lean Six Sigma, clinical and financial information must flow seamlessly regardless of geographic, organizational, or vendor boundaries. Information must be available to the patient, payer, and provider at the right time and at the right place.

While banking and telecommunications industries have set the example for interoperability, health care continues to lag. According to the Office of the National Coordinator for Health Information Technology (ONC), only half of hospitals (48 percent) are able to find health data from outside sources. And while 78 percent of hospitals can send patient summary care record data, only 56 percent can receive that data.<sup>4</sup>



## What You Can Do Now

There is no panacea for modernizing the outpatient rehabilitation with process automation. Ultimately, it will become so unavoidable that the industry will be forced to evolve. Fee for outcomes and bundled payment contracts will require automation to reduce operational costs, improve information exchange, and refocus provider time back to patients.

There will be clear winners and losers between those that automate the workflows within their practices and those that do not. It is simply a matter of prioritization. I believe that the pressure to automate must continue to be placed on vendors by providers themselves. After all, customer demand, rather than regulatory action, best feeds entrepreneurial creativity and invention.

So what should you be requesting? Below are four pillars of Lean Six Sigma-inspired process automation that your clinical and financial information systems should deliver:

### 1. Your platform “makes the computer do it.”

Human workflows are the combination of all the microworkflows necessary to accomplish goals. Designing effective human workflows in a software program requires a detailed understanding of the technical requirements of the individual steps in an entire process as well as how the endusers perform those steps. Your clinical and financial platform should manage every aspect of human interaction with business process within your normal workflow.

### 2. Your platform lets you share information with anyone, at any time.

As I described earlier, unless your platform is letting you customize access to clinical and financial data within a Health Insurance Portability and Accountability Act (HIPAA) secure environment, you do not stand a chance at modernizing your processes. System interoperability and information exchange is the foundation of process automation and of emerging bundled payment reimbursement models.

### 3. Your platform detects and corrects problems faster than you can.

Your platform should eliminate problems as far upstream as possible. For example, it should find the root cause of denials long before you do with a robust upfront validation process and identify the solution so claims go out clean.

### 4. Your platform gets smarter the more you use it.

Your platform should build intelligence as you use it. For example, as your platform manages claim denials, it should build in rules to avoid those denials in the future. The more you use your automated processes, the smarter they should become.

Process automation should make delivering care significantly easier. With the right team collaboration, process improvement methodology and technology, the administrative tasks that burden physical therapy should disappear. And to weary therapists and practice owners, this means the sweet simplification of what used to take 20 steps into one.

---

## References

1. Website [www.caldwellbutler.com/admin/pdfs/comm/Reg-West.pdf](http://www.caldwellbutler.com/admin/pdfs/comm/Reg-West.pdf). Accessed January 2016.
2. Website [www.isixsigma.com/industries/healthcare/measuring-six-sigma-results-healthcare-industry/](http://www.isixsigma.com/industries/healthcare/measuring-six-sigma-results-healthcare-industry/). Accessed January 2016.
3. Website [www.igi-global.com/dictionary/interoperability/15494](http://www.igi-global.com/dictionary/interoperability/15494). January 2016.
4. Website [www.healthit.gov/sites/default/files/briefs/onc\\_databrief25\\_interoperabilityv16final\\_081115.pdf](http://www.healthit.gov/sites/default/files/briefs/onc_databrief25_interoperabilityv16final_081115.pdf). January 2016.