



LEARN FROM A FABULOUSLY SUCCESSFUL GMP REMEDIATION PROGRAM

by John Johnson

A former colleague caught up with me and sighed, “We upgraded the sops like the regulator wanted, but it hasn’t worked out well at all”. The pain and confusion was etched across his face – he had tried to do the ‘right thing’ but to no avail. So he asked “What should I have done differently?”

Satisfying your shareholders’ expectations, satisfying the legal and cGMP expectations of the international regulatory bodies and staying on the right side of your Board of Directors is a basic requirement of staying in business.

But, often we see the **law of unintended consequences** raise its ugly head. What do I mean by this? Let’s say you identified a need to improve something in the workplace; possibly a process, SOP, laboratory method or system. You planned out what to do and you trained the staff and implemented the change. Yet some time later you noticed:

- > No one is following the new process, SOP, method or system
- > People are working around it
- > It isn’t working; it’s clunky, unwieldy, unpopular and hard to follow
- > ***It has caused more variation and more waste than it sought to prevent***

SO WHAT WENT WRONG?

Why has this change, put in with the best intentions, been so disruptive or difficult to comply with? After all:

- > You did what you thought was right
- > You worked at the desk long into the night
- > You were so busy that it took heroics to make the change



- > You did exactly what you thought the regulators wanted, so why are you now experiencing so much angst and heartburn, recriminations and rework?

From our research and case studies, this ‘doom loop’ is remarkably common, yet relatively easy to avoid given:

- > A staunch commitment to intimate involvement of the user in all proposed changes
- > A discipline to drive simplification into all operations; stripping out what is not needed, removing distractions and underscoring critical steps
- > An obsessive commitment to employee education, not just on-the-job training
- > A deep understanding of the science and compliance requirements associated with your technology or product; leading to effective risk-based decision making

This White Paper describes a remediation program that appeared at first to be impossibly daunting, expensive and unattainable. The company had received a range



of critical and major GMP deficiencies from the UK regulatory body, MHRA, and was facing a referral to MHRA's Inspection Action Group. Manufacturing had to be suspended pending a risk assessment of the non-compliances; evaluating the effect of the non-compliances in terms of risks of misbranding and adulteration of the products. Shifts were cancelled, the supply chain was suspended and an urgent remediation program begun.

The obvious things were done immediately:

- > Acknowledgement of the issues with the Agency
- > Evaluation of the error chain that led to the non-compliances
- > SOP changes, batch manufacturing record and log book upgrades
- > Timely and thorough correspondence with the Agency

NSF was asked to participate in leading this activity, advising on what to do to avoid false starts, wasted effort and reworked documents. With our involvement, the company made a critical decision that was estimated to reduce the time in IAG referral by six months and to allow the company to get back into production three months earlier. These were 'must haves' not just for the performance of the business, but for its **survival**.

We worked with the company to:

- > Look critically at the staff behaviors that led to the critical and major non-compliances



- > Assess how those behaviors relied on the motivation, ability, simplicity of method, triggers/cues and basic habits of staff performing their daily work
- > Assess how those behaviors could be altered to ensure the right decisions are made at the right time by the right people without relying on the 'senior few'
- > Underpin the remediation program with a series of measured, targeted interventions in:
 - Leadership and management development training
 - Behavioral GMP
 - Human error reduction and focus on preventing recurring variation/deviation
 - Risk identification, evaluation and action-centered programs to mitigate risk
 - Compliance and technology-based training so that staff understand the 'know why' not just the 'know how'

We mapped the whole range of expectations from the U.S. CFRs, the EU GMP Vol. IV guide, ICH guidelines and using a deep knowledge of the FDA Quality Systems Inspection Technique, we:

- > Fixed the true root causes and addressed the behaviors that led to the non-compliances
- > Fixed the issues in a way that was error-proofed, sustainable and economic to the business
- > Identified other, previously unknown critical risks so the site could face future inspections with more confidence and therefore reduced risk of business discontinuity, recalls and poor yields/outputs
- > Helped grow successors and partners to the senior few, spreading the workload and sharing the responsibility for maintaining perpetual inspection readiness
- > Mapped the GMP expectations against our education syllabus and selected key interventions which would give the biggest (and longest) 'bang for the buck'



The key message here is:

- > Educating your staff (beyond the typical training events) promotes less complexity throughout the documentation system, drives flawless execution of key steps and grows your staff's contribution to the long-term health of your organization
- > So don't even think of making a change without thinking education, not simply training!

Please visit the NSF library

www.nsf.org/info/pblibrary for additional resources like our videos and webinars on:

- > How to Jumpstart Your Pharma Business by Simplifying Processes
- > The Art and Science of Simplification – How to Win Your War on Complexity
- > Remediation the Right Way

ABOUT THE AUTHOR



John Johnson is passionate about helping organizations foresee and overcome the barriers to sustainable long-term growth. He brings 28 years' experience across a range of companies in the pharmaceutical and healthcare industry. He has worked in small, medium and large pharma biotech companies across the product lifecycle for a wide range of dosage forms, holding senior operational and corporate-level experience in operations and quality assurance and leading multinational companies in many strategic projects.

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