

# CASE STUDY: Staff Scheduling Software Implementation: Intangible Benefits of Expert Support

## AT A GLANCE

For a multi-site health system, inefficient, outdated paper scheduling was a major pain point. This led to frustrated employees, higher expenses from overtime and agency staff, increased turnover, and uneven patient care. To tackle these issues, the organization brought in Workforce Edge (WFE). The solution involved developing a strategic plan, streamlining operations, improving master schedules, and rolling out a new scheduling system, with WFE providing expert guidance and ensuring the project's success.

## BACKGROUND:

This is a case study about our partnership with a multi-site health system in a suburban enclave of a major metropolitan area. The organization offers a broad range of healthcare services including critical care, ambulatory services, long term care, and mental health and addiction services. For many years the hospital struggled with inefficient and outdated paper-based scheduling which led to an incohesive approach to scheduling, limited predictability for employees, and frequent scheduling conflicts. Unit managers found themselves unsupported, other than a staffing office placing floats to backfill last-minute sick calls.

## CHALLENGE:

The hospital struggled with inefficient and outdated paper-based scheduling which led to limited predictability for employees.

The snapshot of the issues are as follows:



**Time Consuming:** Operational leaders spent precious hours each week having to fill shifts and spending time on lower value transactional practices that easily could be automated under their clinical expertise and direction. Many leaders were spending weekends re-creating schedules each 6-week period.



**Employee Frustration and Lack of Equity:** Employees had limited visibility to their schedules, schedules weren't updated in real time, schedules could not be accessed easily or remotely severely impacting work-life balance. Processes were inconsistent, lacking standardization of approvals, denials, and timelines varying unit-to-unit.



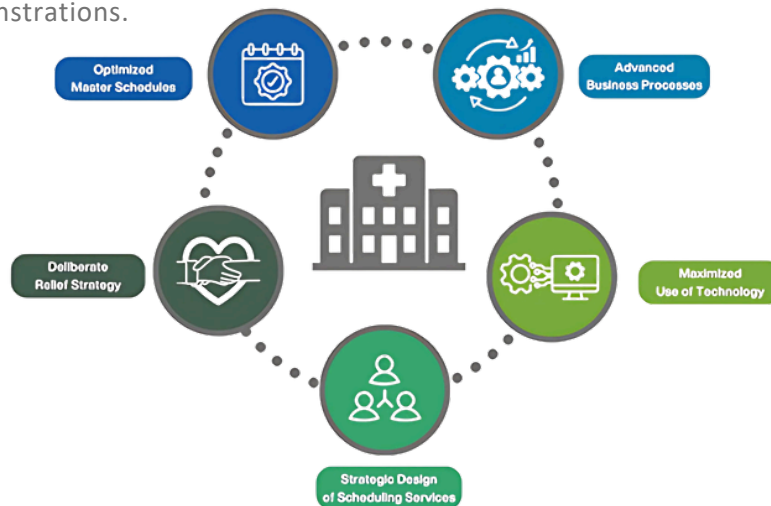
**Inconsistency in Coverage:** The number of short staffing incidents was at a constant high, often during peak times or specialized shifts, leading to excessive overtime. Achieving baseline staffing was a best random, one shift a unit overstaffed, and on the next understaffed.

All-in-all, the hospital's current scheduling ecosystem was unsustainable and prevented the organization from achieving optimal efficiency and staff satisfaction.

## SOLUTION: ✓

The initial phases of the partnership included developing a Roadmap and business case to help the healthcare organization pinpoint and collectively agree how to move forward. Following Board Approval of the Roadmap, the design phase was activated in order to:

- Develop organization design options for the staff scheduling operating model (ensuring linkages and integration to workforce planning);
- Re-engineer key business processes;
- Optimize master schedules while operationalizing the intended model of care and budget;
- Curate a relief workforce strategy given the clinical and quality agenda; and finally
- To enable the above design, the definition of functional requirements to support system procurement and to control vendor demonstrations.



**FIGURE 1.0 KEY COMPONENTS OF WFE'S HEALTH WORKFORCE OPTIMIZATION MODEL ©**

Following definition of the above strategic model components, guided system demonstrations were then led by WFE, and a system vendor was chosen. Being vendor neutral allowed WFE to act as a true extension of the client. This model is unique as many consulting firms partner with the system vendors to support implementation.

Given WFE's partnership model the healthcare organization could be confident we were there to help hold the system vendor accountable and to support accurate set-up of the sandbox and an on-time successful implementation.

***The remainder of the case study focuses on the system implementation to enable an optimized workforce planning, staff scheduling, and deployment business.***

We will start with the benefits achieved because systems are “enabling” technologies, required in part to help activate strategy. Leveraging the team’s deep expertise in process and master rotation design, the hospital was successful in transitioning from excel based scheduling to an automated system. This helped to schedule more efficiently, fill shifts proactively. Having high quality optimized master schedules housed in the system as the unit blueprint which mirrored intended model of care, staffing mix, and baseline enabled full position controls to also be implemented.

- **Position Utilization Gains:** Analyzing 10 units as proxies, we achieved 1.75 – 3.25 FTE savings to budget per unit for nursing through position and master schedule optimization. This further resulted in the close of vacancies and optimization of position mix.
- **Cost Avoidance:** Absence Notification Process Changes alone led to cost avoidance of \$7M annually expected from changing automated book-offs policy. This projection was validated using 3 years of payroll data.
- **Scheduler/Clerk FTE Savings:** Implementation of Workforce Edge’s Schedule Mapping Tool © enabled significant scheduler bandwidth and decreased scheduler effort required to enter schedules. With this tool and the efficiencies from new optimized scheduling business processes, the organization was able to onboard 3500 additional employees to the centralized scheduling service with only 1 FTE added for scheduling resource.
- **Cost Reductions:** Reduction in overtime, agency spend, overpayments, administrative errors, turnover costs, and sick hours. Decrease in the cost of an hour worked.
- **Greater Employee Engagement:** Enhanced consistency and standardization scheduling practices leading to great transparency and equity in staff scheduling related requests and decisions and schedule quality.
- **Closer to the Point of Care:** Increased time for clinical and support managers/staff to care for patients, leading to expected improvements in adverse health events and staff safety.

## KEY STEPS & TAKE-AWAYS FROM THE SYSTEM READINESS AND IMPLEMENTATION JOURNEY



Together with our client partner, we have identified a few of the key stage gates respecting system readiness and their take aways:

**Informing System Requirements:** A comprehensive review of the process workflows and collective agreements were conducted to identify system requirements.



**Take Away:** Ensure participants (Scheduling, Operations, HR, LR, IT, Payroll, Finance, etc.) fully understand the requirements and the trade-offs between them. Misinterpretation or lack of clarity in requirements can lead to delays and system inefficiencies and/or negatively impact testing.

**Conduct Extensive User Acceptance Testing:** If processes do not drive testing, you risk not testing for the right scenarios and missing critical path items altogether. Ensure testers have good knowledge about how to test, and about how different parts of the system integrate.



**Take Away:** Qualitative feedback from testing should be used to fine-tune the system and identify potential areas for refinement. This is critical as failures during testing can cause major re-work to the beta instance.

**Integrations Testing:** To ensure that the scheduling system worked seamlessly with the payroll system, multiple rounds of payroll and coding testing were conducted.



**Take Away:** Simulating real-life payroll impacts can be a challenge given needing to account for a variety of payroll nuances. Achieving the correct results requires modification of system requirements in real-time, adding complexity to the process.

**Delivering Tailored “Super-User” Training Sessions using the “Tell me, Show me, Try me” approach:** Tailored in person training session were conducted where key users were able to practice in a hands-on environment.



**Take Away:** Adapt the training to be process integrated which helps with the varying levels of technical proficiency.

**Transitioning Schedules from Paper-based to System-entered:** Moving the hospital's master and working schedules from excel to the new system was challenging. WFE developed a new tool to streamline this transition, reducing the manual workload and helping to save time and resources.



**Take Away:** Import procedures can impact employee line assignments, requiring meticulous validation to avoid misalignment. Without a position alignment and master schedule load tool the hours of effort can be immense to enter assignments.

**On the Ground Support Before and During Go Live:** As the go-live countdown began, the integrated team was on-site to provide on-the ground implementation support. This included standing up a command center to monitor the system's performance, to track and resolve issues from users, and to provide hands on assistance as user navigated the new system in real time.



**Take Away:** New system users, and managers especially, continued to try to work the old way and having a tendency to keep their hands in the pot. Ensuring that trainers have the confidence to answer questions and re-direct employees back to operating procedures is a challenge in the early days of a new system. Compliance reporting and tracking of forms can help identify a manager who might not trust the system.

**Sustainment:** After the system goes live, the activation of a standards and quality council to manage change controls is an imperative step. There is always a risk of reverting to old habits and creating system workarounds especially when significant process change accompanies a system implementation.



**Take Away:** From a behavioral perspective it is one thing to support managers and employees working inside the new system in new ways. It is another to manage the requests for process and/or configuration changes! It is important to hold the tension and have some faith that the system and processes can deliver. Any change requests should be justified using a written submission procedure and weighted very carefully by a working group.

## CONCLUSION:



Systems are simply enablers of your scheduling and deployment business. Your processes, master plans, operating models, and relief workforce strategies drive configuration, testing, set-up, access, and use.

In this case study the implementation was truly rapid given other organization needs and systems dependencies. It could never have been achieved without the priority definition of those key components.

The timeline from initiation, definition of business structure, system configuration requirements architecture, testing, training, and go-live was a fast paced 9-month period. At go-live all integrations were successful, all processes were enabled by the configuration, and pay was recorded as accurate.

At WFE we view technology 'simply' as the enabler to your business practices and workforce optimization platform (schedules, relief strategy).

**For more information on how WFE can help your organization achieve similar improvements, visit Workforce Edge.**