

eBOOK



ENHANCING NURSE SCHEDULING EFFICIENCY

With Simplified Processes
for Nurses, Schedulers,
and Directors.

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This white paper explores common pain points related to staff scheduling in organizations

EXECUTIVE SUMMARY

Next-Generation Scheduling Solution Designed for Healthcare Organizations

Building an accurate and balanced schedule that guarantees proper delivery of care is no small task, especially in the nursing sector. Without a dedicated management platform and reliable decision-support tools, handling the human variables and logistical constraints of nurse scheduling is complex and timeconsuming.

Managing a singular nursing schedule that meets administrators' expectations, schedulers constraints, and nursing staff demands can feel like solving a Rubik's Cube. A scheduler often needs to evaluate multiple different scenarios by trial and error until a pattern emerges. However, this process doesn't have to be so complicated or costly. There is a simpler way. A way driven by technology, and deeply rooted in healthcare expertise that could potentially solve most - if not all - of the challenges inherent to nurse scheduling.

This white paper explores common pain points related to staff scheduling in healthcare organizations where manual processes persist. A singular interactive system that centralizes communication channels should provide reliable decisionsupport tools for executives and automate manual processes for schedulers and planners, making them more efficient. It should also help nurses achieve a more sustainable work-life balance. In short, healthcare organizations and their staff have much to gain from a robust and comprehensive automated scheduling solution.



An Integrated Cloud Solution for Organizations

1 Managing a Nurse Schedule for Job Performance and Quality of Life

The process of scheduling hourly workers always comes with its share of challenges, regardless of industry. This especially applies to the healthcare sector where the workday never truly ends. At first sight, nurse scheduling can seem a relatively straightforward task, however it involves multiple variables in combination that make the process incredibly complex and prone to error. The nurse scheduling process is really a delicate balancing act of harmonizing nurses' preferences against existing schedule constraints in order to guarantee the day-today delivery of cost-effective healthcare services.

Resource optimization and operational performance are important drivers for schedulers, but these must be weighed carefully against the possible risks of overextending nursing staff and undermining their work-life balance. Nurses work long hours with few breaks and often have little time to recover between their shifts; in addition, the demands of the job are often multiplied by the need for nurses to work overtime and fill in for understaffed units or departments¹.

Since caring for others is a nurse's priority, nurses often struggle with their own self-care. This situation can lead to high stress at the risk of impacting job performance and ultimately delivery of care. Nursing staff working long shifts and overtime are more likely to make errors, report job dissatisfaction or show symptoms of burnout compared to nurses with supportive working environments and adequate staffing levels². As such, one of the challenges faced by healthcare organizations today involves providing nurses with streamlined processes along with the necessary autonomy to successfully balance their professional and personal lives.

2 The Complex Process of Nurse Scheduling Is About to Improve

From influencing employee performance to dictating how healthcare organizations meet their bottom line, overseeing nursing schedules has far-reaching consequences. Shift frequency and the number of hours worked are closely linked to a nurse's work-life balance, stress level and job satisfaction³. Since positive employee experience fuels performance, keeping nurses engaged and satisfied with their work environment has rapidly become one of the top priorities of any healthcare manager.

Schedulers have to ensure around-the-clock employee coverage while also aiming to have the nursing staff performing at their best whenever they clock in. Without dedicated automated tools, it is extremely challenging to effectively adhere to all the rules and variables involved in the nurse scheduling process⁴. This makes it difficult to guarantee that all personal nursing requests can be accommodated or dealt with in a timely manner for all staff members.

1. Rogers, A. E., W.T. Hwang, L.D. Scott, L.H. Aiken, and D.F. Dinges., *The Working Hours Of Hospital Staff Nurses And Patient Safety*. *Health Affairs*, 2004 Aug; 23(4):

2. McHugh, M.D., A. Kutney-Lee, J.P. Cimmiott, D.M. Sloane, and L.H. Aiken., *Nurses' Widespread Job Dissatisfaction, Burnout, And Frustration With Health Benefits Signal Problems For Patient Care*. *Health Aff (Millwood)*, 2011 Feb; 30(2): 202-210

3. DPE Reseach Department, 2019. *Safe Staffing: Critical for Patients and Nurses*.

4. Clarke SP, Donaldson NE. *Nurse Staffing and Patient Care Quality and Safety*. In: Hughes RG, editor. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 25. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK2676/>

“Our results show that by using a centralized model, nursing managers in healthcare organizations can improve the desirability of nurse schedules by approximately 34% and reduce overtime by approximately 80% while simultaneously reducing costs by just under 11%.”

– Wright, P.D. & S. Mahar (2013)⁵

3 Support Optimal Employee Performance and Enhancing Quality Care

For healthcare organizations, nurses represent an important driver behind an institution’s performance and operational cost-effectiveness. Unfortunately, in recent years, several trends in healthcare staffing patterns have converged to create suboptimal working conditions for nurses. High patient acuity levels coupled with rapid patient cycles and nurse shortages have presented serious challenges to the cost-effective management of nursing teams and subsequent delivery of care services⁶.

In this context, administrators are compelled to invest resources to address preventable workforce challenges like overtime and absenteeism that indisputably impact the bottom line and forward-planning ability⁶. Healthcare executives now must find innovative ways to decrease labor costs and improve workforce productivity while efficiently capturing human and financial performance. To achieve this state of fluid information management, decision-makers need reliable tools to capitalize on actionable operational data.



5. Wright, P.D. & S. Mahar, Centralized nurse scheduling to simultaneously improve schedule cost and nurse satisfaction. 2013 Dec. Omega; 41(6): 1042-1052.

6. Wheatley, C. Nursing Overtime: Should It Be Regulated? 2017 Jul-Aug. NURSING ECONOMIC\$; 35(4): 213-217

One Solution to Connect All Scheduled Employees

LGI Scheduling integrates seamlessly to existing digital infrastructures and works to optimize schedule management, budget control and regulation compliance. Healthcare organizations are now able to take advantage of a centralized and fully integrated solution that streamlines staff scheduling processes, promotes better decision-making and optimizes workforce productivity.

Nurses: Avoiding Overtime and Preventing Absenteeism

LGI Scheduling was designed to overcome the challenges that undermine nurse performance and contribute to absenteeism and unnecessary overtime. This cloud-based platform is set up as a scheduling solution that manages staffing needs centrally and provides nurses with the autonomy they need to successfully balance work and personal life. It enables agile responses to last-minute changes, preventing staff or skill shortages and maintaining accurate schedules and staffing levels.


How the Solution Streamlines Nurse Scheduling and Working Environment

LGI Scheduling is an interactive platform designed to provide nurses with increasing autonomy through cloudbased delivery and enhanced employee self-service features. Nurses will benefit from a schedule that is always up to date while ensuring that operational requirements and collective agreements are highlighted and adhered to. LGI Scheduling provides nurses with the ability to participate in decision-making and to communicate effectively with other healthcare professionals involved in providing patient care.

Nursing professionals can customize notification options and use the software to be reminded of upcoming shifts or notified of real-time changes to their schedule. These examples of collaborative features are just a small glimpse into the features that provide nurses with the freedom necessary to balance their professional and personal life successfully.

A centralized, electronic scheduling system allows nurses to access their personal profiles and interact with their schedules seamlessly to make changes, submit requests, indicate availability, and respond to open shifts in real-time. With access to reliable scheduling tools and a scheduling platform that centralizes all communications and data, nurses are now in control of their work schedules and always up to date with requests or changes made to the master schedule.

LGI Scheduling streamlines staff scheduling processes, promotes better decision-making and optimizes workforce productivity



Schedulers: Centralizing Communication and Digitizing Processes

With LGI Scheduling, schedulers can change and update the schedule seamlessly and are freed from micro-managing information across different systems for coordinating nurses' day-to-day activities. The scheduling platform centralizes nurses' requests and queries into a single communication system and offers advanced data to improve decision making. LGI Scheduling allows for better planning and helps schedulers avoid preventable situations like staff shortages and unnecessary overtime.

Centralizing Processes to Build Nurse Autonomy

LGI Healthcare Solutions's integrated platform is a fully centralized scheduling system that removes many of the manual repetitive processes and human variables associated with traditional nurse scheduling. It is designed to empower nurses to manage their schedules autonomously while offering managers a unified scheduling system with streamlined processes. The platform is built with configurable replacement and scheduling rules to ensure compliance with collective agreements and other external constraints, flagging situations that require review.

Accessible on all devices, LGI Healthcare Solutions's cloud-based scheduling platform allows schedulers to send automated text messages, voice calls, or emails to nurses as soon as new open shifts are available or when changes are made to an existing schedule. Shift callout automation provides a shortcut to the shift replacement process by simplifying and streamlining the ways a scheduler can reach out to multiple employees simultaneously. With configurable master rotation templates, managers can minimize time spent creating conflict-free schedules with a digital planning tool that can precisely define the work coverage needed for a particular unit or department.

LGI Scheduling eliminates repetitive tasks and manual data entry, guaranteeing a continuous flow of accurate and up-to-date information among users. Additionally, the platform integrates seamlessly to existing LGI's Payroll and HCM systems so schedulers and managers can easily access relevant information and generate reports that are accurate, up-to-date, and consistent with the organization's expectations. Working from centralized data and unified communication channels, schedulers are now able to shift their attention from repetitive administrative scheduling tasks to overseeing employee performance and supporting the different nursing teams on the floor.



With real-time data collection and measurable workforce metrics, stakeholders can initiate cost-saving transformations and better shape the long-term workforce planning of their establishment

Directors: Supporting Decision-Making With Digital Insights

LGI Scheduling provides healthcare executives with a clear workforce management overview and serves as a strategic portal for accessing actionable, operational, and manageable data. The solution provides a broader, real-time view of the scheduling process along with dedicated data designed for statistics and modeling reports. With real-time data collection and measurable workforce metrics, stakeholders can initiate cost-saving transformations and better shape the long-term workforce planning of their establishment.

Transforming Information Into Actionable Performance Data

With an electronic scheduling process, healthcare organizations are more agile with centralized communication channels and actionable data for better decision-making. Organizations can replace costly and repetitive manual processes by automating administrative task management and increasing staff autonomy with new digital self-service capabilities.

The LGI Scheduling solution captures the moment employees clock in and out by collecting time entries and comparing them against the current schedules. The system determines whether the time captures are within acceptable range and guarantees a more accurate timesheet for payroll. With valuable insights into workforce attendance and activities, administrators can become proactive about issues such as staff performance, overtime, and employee absenteeism.

The ability to integrate directly with LGI's current HCM or Payroll system and some external systems is also a tremendous asset that ensures consistent and accurate information and reliable cost-containment. In addition, healthcare organizations can start managing their budgets more effectively by automatically comparing master rotations to allocated budgets, thereby avoiding situations that lead to costly unplanned schedule changes, unnecessary overtime or underutilized resources. By streamlining the nurse scheduling process, LGI Healthcare Solutions's cloud-based platform offers real-time insights into critical operational metrics and provides a granular view of labor and financial assets. With a fully customizable dashboard, administrators can access information-rich workforce data to easily report on trends and employee performance, ultimately enabling more effective cost-control and improved time management effectiveness.

Cloud-Based Solution

Employee Experience Is at the Heart of the Solution

Engagement is one of the many areas that is negatively impacted when nurses find it hard to achieve balance between their professional and personal lives. When nurses are feeling at the mercy of a schedule that offers no guarantee of being accurate or up to date, adding stress and exhaustion to eroding employee engagement can lead to increasing levels of absenteeism and employee turnover⁷.

If employee experience shapes the way an organization is perceived as an employer, then technology is a reliable asset to empower nurses with the autonomy they need and the working environment they want. By leveraging a new set of digital tools, healthcare organizations can now provide nurses with the resources they require to achieve a sustainable work-life balance and stay engaged at work.

Cutting-Edge and Robust Technology

LGI Scheduling is designed to help nurses interact with their work schedules from all web-enabled devices, desktops, tablets, and smartphones. It's a new and better way of accurate and paperless scheduling that promotes real-time connectivity through a central, cloud-based, electronic scheduling platform.

This unique scheduling solution increases employee autonomy with self-service features and helps nurses feel connected to their workplace. It provides the staff with better visibility of their work schedule and on-demand access to the information they need. LGI Healthcare Solutions's platform is the only scheduling solution on the market that fully combines master rotations, electronic schedule and leave management, automated shift callouts, and time and attendance functionality in one fully integrated, streamlined solution. The synergy between these different modules increases data quality and provides administrators with reliable forecasting data, timely insights into potential compliance issues, and real-time performance metrics.

With access to information-rich data, managers can stay within allocated budget and reduce the variance at the core of the different scheduling processes in place. With an interactive and centralized scheduling solution, healthcare organizations can capitalize on greater visibility into workforce attendance, automate manual processes, and prevent inappropriate staffing or resource allocation from taking place. LGI Scheduling increases transparency across all work activities and provides unique strategic insights into workforce management and cost containment opportunities.



Did you know...

LGI Scheduling is hosted on Microsoft Azure's renowned cloud servers certified ISO/IEC 2700, a certification that ensures maximum security to safeguard the confidentiality of patient data

7. G. Luymes, February 2020. "Working in a pressure cooker": Violence against B.C. nurses linked to heavy workload. Vancouver Sun. <https://vancouversun.com/news/local-news/working-in-a-pressure-cooker-violence-against-b-c-nurses-linked-to-heavy-workload>

Implementation Process

5-Steps to a Successful Technology

- Phase 1
Initiation
- Phase 2
**Project Implementation
and Strategic Planning**
- Phase 3
Transition
- Phase 4
Operation and Optimization
- Phase 5
Continuous Evolution

Since 2003, LGI Healthcare Solutions has successfully deployed its scalable suite of cuttingedge staff scheduling and time & attendance solutions in Canadian healthcare organizations

Implementation Process

Phase 1 Initiation

A team will take the time to understand the client's technological and operational needs and to define the solution requirements according to the client's vision and objectives. Phase 1 allows both parties to fully understand the scope of the project and identify the various systems that will be impacted. A team of experienced consultants will identify the main deliverables of the project through careful analysis of current workflows and processes, determine the work that needs to be carried out, quantify the efforts required for a successful transition phase, and identify and form the basic teams for each project. A preliminary roadmap encompassing the different project milestones and next steps will be created to ensure a smooth and seamless transition to the new LGI Scheduling platform.

Phase 4 Operation and Optimization

LGI Healthcare Solutions supports the client organization throughout its change management initiatives and carefully monitors the deployment status of the solution and its traction with different users. A dedicated Client Services team that operates locally in Canada, with an average of over 10 years of experience supporting clients and systems, will be readily available. LGI Healthcare Solutions is committed to offering exceptional client support and remains available for additional on-demand training or technical inquiries.

Phase 2 Project Implementation and Strategic Planning

Consultants will establish an overall project management structure that defines the schedules and execution strategies as outlined in the previous phase. During Phase 2, project teams from LGI Healthcare Solutions and the client organization collaborate to guarantee a quick start-up of operations. The client will determine which features will be integrated in the initial implementation processes and those that will be implemented later. The team will identify processes to replace or create, and define the plans for transferring and/or keeping historical data. Then, after validating with the client that all project requirements are captured accurately, LGI Healthcare Solutions's team will start developing a plan to bridge any gaps, and initiate the activities identified as priorities.

Phase 5 Continuous Evolution

Phase 5 involves the continuous evolution of LGI Scheduling. This includes the addition of new features and enhancements to the application through the delivery of new software versions. LGI Healthcare Solutions strives to enhance all solution offerings through innovation, collaboration, and partnership with our clients to support the evolving needs in healthcare. Through feedback and new ideas, the company evolves in its development of technological innovations to assure continuous and effective solutions to the needs of healthcare organizations.

Phase 3 Transition Phase

Implementation specialists work diligently with the client's team to set up the infrastructure of LGI Scheduling and begin system implementation. Configuration workshops are conducted, as well as master rotation sign-off and publishing. The conversion of data and the test plans interface are initiated. LGI Healthcare Solutions's team ensures ongoing support for the continuity of business operations and work processes for the client.

During this complex phase, LGI Healthcare Solutions validates the performance of LGI Scheduling through parallel testing and makes the necessary adjustments to optimize the operations of the new system. Upon successful completion of this stage, the system go-live is scheduled and executed.

End-user training is also conducted during this phase, ensuring the progressive onboarding of super users, schedulers and head nurses, achieving positive user-adoption and optimized use of LGI Scheduling as quickly as possible.

A trusted healthcare technology partner

LGI Healthcare Solutions offers healthcare management solutions that help make healthcare organizations more efficient and improve the experience of healthcare teams.

With 40 years of experience and dedication creating innovative, best-in-class technology projects, LGI Healthcare Solutions is in a unique position to help healthcare organizations integrate innovation in a sustainable and measurable approach.

40

years of experience in healthcare IT

450

dedicated employees across Canada

320K

healthcare professionals and staff users

6M

of patients supported



“It is always a pleasure to work with LGI Healthcare Solutions’s team. Their staff always answers questions quickly and follows up to ensure the products work according to our needs.”

ESTHER BRIAND
Medical Archives and
Appointments Control Centre
Coordinator, CISS of Laval

“The platform LGI Education (MedSIS 3C) enabled our medical school to deliver on many accreditation items and achieve an outstanding and successful accreditation, receiving an unprecedented accreditation with compliance in all 132 standards.”

ASSOCIATE DEAN
Doctor of Medicine (MD) Program
University of Alberta

“Proper recording of the staff’s time in and out will give us accountability in addition to reducing the time wasted by nursing staff trying to find replacement.”

GILLES VERRIER
Interim Executive Director
for the Lions Housing Centres