



# Optimizing Healthcare Resource Planning and Allocation

A balanced approach to managing labor and demand



## Introduction

Healthcare organizations everywhere are seeking to more effectively and efficiently use their labor resources and recruit new talent. The COVID-19 pandemic, with its unpredictable surges in volume and care delivery needs, has proven how critical it is to have the right staff in the right place at the right time. The operational challenges of the pandemic are compounded by aging workers and patients, nursing shortages, and increasing complexity of care across all settings.

Unprecedented technological advancements that occurred during the pandemic have brought to light the importance of integrated solutions and are pushing companies over the technology tipping point. According to McKinsey & Company, “The crisis has brought about a sea change in executive mindsets on the role of technology in business. In our 2017 survey, nearly half of executives ranked cost savings as one of the most important priorities for their digital strategies. Now, only 10 percent view technology in the same way; in fact, more than half say they are investing in technology for competitive advantage or refocusing their entire business around digital technologies.”<sup>1</sup>

Many healthcare systems have realized that without a centralized staffing and scheduling model they have limited systemwide resource visibility across their organizations. This inhibits their ability to efficiently manage labor resources and meet patient care demands. They are now taking the time to reevaluate current staffing and scheduling processes to ensure that they can match the need for care with the right resources in the right setting.

Staffing and scheduling solutions are vital tools that enable healthcare organizations to plan and manage resources, both day-to-day and shift-to-shift. By centralizing staffing and scheduling, organizations can streamline processes, improve accuracy of data and reporting, and reduce administrative burdens on operational leaders. And by aligning staffing and scheduling with strategic initiatives, healthcare organizations can succeed in today’s financially volatile environment.

## Challenging times ahead

The January 2021 National Hospital Flash Report found that hospitals and health systems closed out 2020 with a worsening financial picture. Margins fell significantly, with declining volumes and outpatient revenues and escalating expenses compared to 2019. Despite experiencing lower overall volumes, hospitals continued to see expenses mount with the high costs of caring for COVID-19 cases and other high acuity patients. Total expense per adjusted discharge and labor expense per adjusted discharge both increased 14.4% throughout 2020 and 19% YOY in December. Total expense and labor expense per adjusted discharge rose YOY and above budget for hospitals of all sizes. Hospitals with 500 beds or more had the biggest YOY increase for total expenses at 22%.<sup>2</sup>

Healthcare organizations must have visibility into available labor resources in order to make fiscally appropriate, data-driven decisions regarding how workers are allocated. But most healthcare organizations are unable to accurately obtain an adequate workforce supply to meet the projected and actual demand for care. Unplanned overtime, unused capacity hours, and an increased reliance on temporary workers have made the staffing and scheduling picture more costly and complex just when care demands are changing drastically. Staffing operations must adapt to meet these evolving consumer demands. When faced with a workforce supply that lacks pertinent qualifications or experience, organizations are at greater risk of adverse patient outcomes.

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***Patient safety and quality have received significant attention in our industry since the original landmark report, *To Err is Human*, was issued in 1999 by the U.S. Institute of Medicine (IOM). The report was a call to action and **set forth a national agenda to reduce patient safety errors**. Technology continues to play a critical role in reducing medical errors.***

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While I can say that COVID has been a challenge, it has definitely confirmed the need for a centralized model for staffing and scheduling. I can't tell you how many times I've heard over the last several months, if only we had our centralized staffing office in place. Work has continued around developing our plans for transitioning to a centralized staffing office model, with the goal to bring all staffing operations to one centralized hub where we can collaborate with our hospital system to approach staffing and scheduling as an enterprise.<sup>3</sup>

Melissa Winfield, System Nursing Operations Manager  
BayCare Health Systems

Healthcare labor is typically the highest controllable cost in an organization. Executives know that current demands for care will continue to stress available labor resources, putting even more pressure on the need to minimize labor costs while maximizing returns. “The overall expense of labor is increasing, but more hospital leaders also are focused on labor,” says Erik Swanson, a vice president at the Skokie, Illinois-based consultancy Kaufman, Hall & Associates, LLC. Indeed, labor’s share of total expenses increased steadily from 2008 to 2018, rising from 50.6% to 54.9% among hospitals tracked by Fitch Ratings.<sup>4</sup>

## Understanding staffing and scheduling models

Staffing is the ability to find the right employee with the relevant skills, licenses, certifications, and competency to complete the available assignment. Scheduling is the ability to plan and document specific resource availability pertaining to volume metrics or staffing matrices. To schedule and assign the necessary resources, organizations must have sustainable tools that are planned and budgeted for and that combine variables such as employee availability and preference with organizational requirements such as skill and job mix and necessary competencies. There are three different approaches to staffing and scheduling used by healthcare organizations today. The most cost-effective and efficient approach is to centralize all staffing and scheduling operations, but this requires an effort to standardize workflows and processes across the organization. When organizations are not fully ready for standardization, we consider them to be on the journey toward centralization.

### Healthcare staffing and scheduling models

#### Decentralized

- Staffing and scheduling decisions are managed at the unit or department level
- The scheduling patterns and length of time that each schedule represents may differ (4 week vs. 6 week schedule with different shift rotation patterns)
- The responsibility to fill shifts is managed at the facility or unit level rather than in a central office
- Units schedule and staff independent of other areas and don’t have visibility beyond their team

#### Hybrid

- The schedule is owned by each department leader (or designee), regardless of the methodology used to schedule, i.e., self-scheduling, patterns, etc.
- The department leader or designee finalizes the schedule, then a centralized staffing office assumes responsibility for schedule changes
- The staffing office works to anticipate staffing gaps and utilizes tools/strategies to fill shifts
- The staffing office may assume responsibility for allocating staff on off shifts, weekends, and holidays

#### Centralized

- A single person or a dedicated team manages and oversees scheduling
- Schedules are planned weeks in advance with a consistent approach across all units and departments
- The centralized staffing team fills gaps when employees call in sick, take vacation, or volume or workload demands more staff
- Delivers comprehensive visibility into resource allocation for cost containment

Each healthcare organization deploys the staffing and scheduling approach that best meets its needs. COVID-19 — and its attendant financial stress — has brought to light the critical importance of having visibility into staffing resources and renewed attention on the centralized approach to staffing and scheduling, which can be both cost-effective and efficient. Staffing to demand with the right resources is critical amidst an intense focus on the safety and wellness of employees and patients. Healthcare organizations are focused on resource management, but as patient volumes have fluctuated, their financial health has been challenged. In an industry where an organization's people are undoubtedly its greatest asset, ensuring frontline talent is available to provide the highest quality care to patients has never been more critical than now.

## The benefits of centralized staffing and scheduling

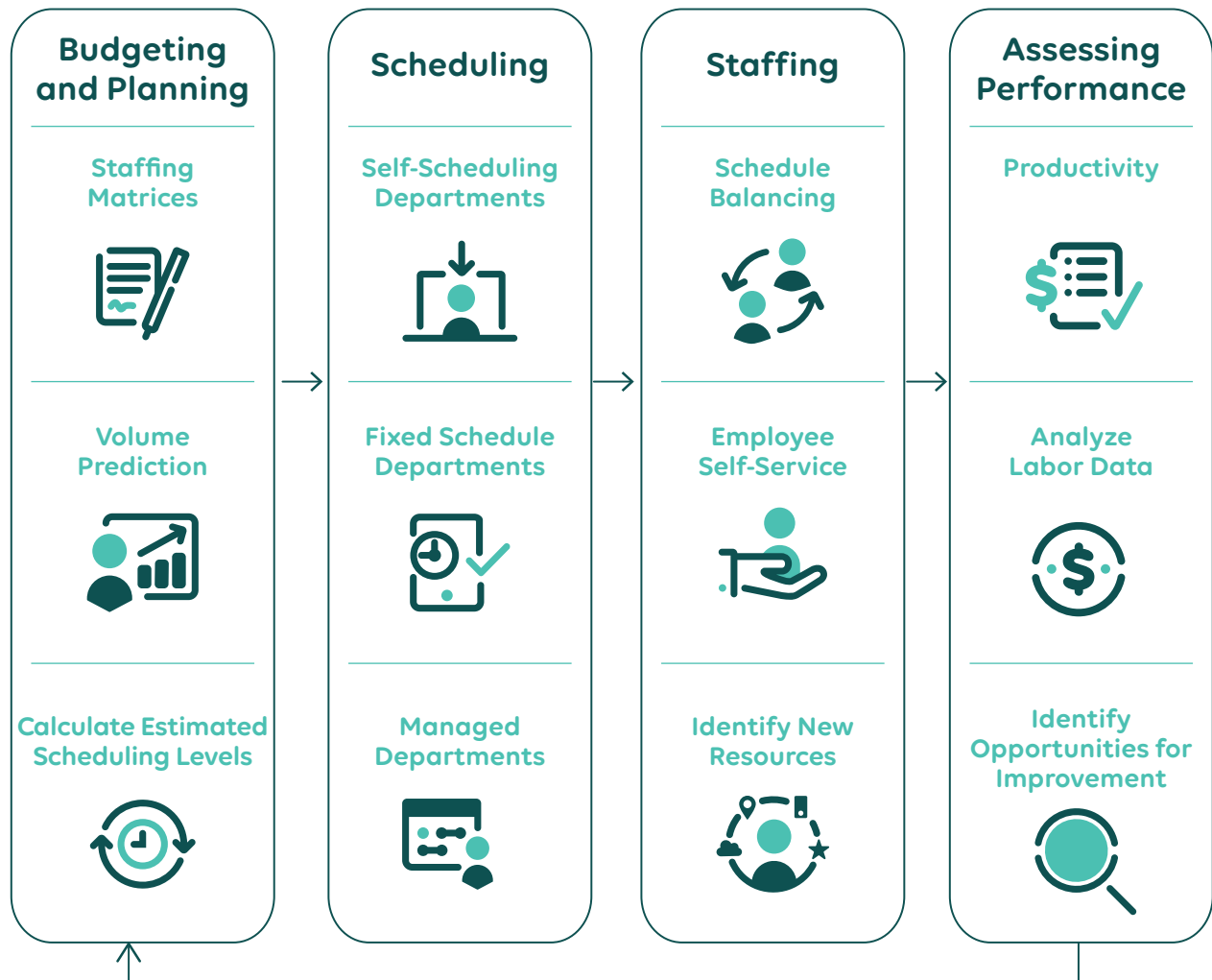
In a centralized model, a staffing team is accountable for creating schedules and assisting with day-to-day staffing support. This centralized team assesses staffing for all units across the enterprise — filling necessary shifts with staff members from their internal resources, based on availability and qualifications. Automated skills and certification tracking help ensure that only nurses with the right training and experience are scheduled in the right place at the right time.

Centralized staffing and scheduling enable an organization to streamline processes, improve accuracy of data and reporting, and reduce administrative burden on operational leaders. Unit leaders often spend an enormous amount of time working to fill gaps in staffing. Having one centralized function for policy adherence and decision making reduces subjectivity that can impact staff morale. It also provides the visibility you need to make real-time decisions that can reduce unnecessary overtime spend as well as the reliance on costly agency staff. Organizations that have utilized a fully centralized approach report that they are able to more effectively deliver fair and equitable schedules across all care units and settings.

**As healthcare organizations continue to grow and expand, centralized staffing models are almost certain to be the future of healthcare staffing. From having an enterprisewide view of staffing needs to helping achieve care quality and safety goals, improving caregiver engagement and retention, and creating more positive work environments, centralized staffing answers a variety of strategic staffing and hiring needs.<sup>5</sup>**

**Meg Duffy, Senior Director of Staffing and University Outreach  
Cleveland Clinic**

## Budgeting and planning: The critical first step



No matter the staffing model you use, it's important to begin with budgeting and planning to establish the quantity of staff necessary to provide anticipated care. Several key metrics such as hours per patient day (HPPD), unit of service (UOS), and cost per patient day (CPPD) associated with the practice setting provide the metrics and financial goals that drive daily staffing decisions. These metrics provide a benchmark for each area of patient care to compare shift-by-shift or daily resource allocation to the volume of care activity required. Ultimately, the actual performance from each department is consolidated for leaders to review total cost and utilization of resources.

Planning accurately for the correct number, skills, certification, and competency of employees needed for a specific schedule period is essential to have the right resources available to deliver and coordinate care. This results in a staffing matrix that provides managers the flexibility to make decisions as needed to support the fluctuating care needs. At the same time, it supports the monitoring of day-to-day achievement to budgetary goals that are either cost-per-patient or hours-per-patient metrics.

## Effective scheduling sets you up for success

A centralized scheduling approach automates the creation of schedules based on forecasted patient volume, while also taking into consideration employee skills, experience, and preferences. You can more effectively predict future demand based on historical volume data and real-time patient flow from your ADT system and other patient flow technologies. Consistent use of metrics for expected volumes such as budgeted daily census, average daily census, hourly census, and forecasted volumes will bolster schedule accuracy and labor cost management.

## Self-scheduling boosts employee satisfaction

Employee self-scheduling is a key feature of the centralized scheduling model. Once needed staff levels are established, employees can select the shifts they would like to work. This allows the organization to establish a baseline for the number of staff members required meet the anticipated demand for care based on selected metrics. Structured self-scheduling models enforce for each eligible staff member how many shifts must be selected, weekend or other day-of-week commitments, and skill or certification requirements — all in an automated fashion.

## Better manage float teams

With their high number of cross-trained employees, float teams benefit from a centrally managed approach. When a healthcare organization has a broad view of which employees are eligible to work in certain units or facilities, there is more flexibility to ensure both schedule and care demands are met. It also allows greater insight to ensure employees are working their full FTE, since employee hours can be balanced across multiple units, mitigating the need for costly agency or temporary staff.

## Create a level playing field

Centralized staffing and scheduling promotes a fair and equitable process for all employees. While considering a centralized approach to staffing and scheduling, it is critical to have bidirectional communication venues available to the employee, scheduler, and staffer. For instance, there is less chance that a staffing coordinator working in a centralized function will know that Anna's child has soccer practice on Saturday morning or that Pat is in school every Tuesday night. Modern staffing and scheduling technologies allow employees to electronically document preferences and availability, so you have a holistic approach to the schedule decision-making process.

## Staffing to meet demand

Centralized staffing ensures appropriate resources are available to meet care demand so that positive outcomes can be achieved. You can minimize over- and under-staffing with whole-house visibility and coverage indicators, fill open shifts efficiently through prioritized call lists and automated SMS text messages, and quickly rebalance staff based on workload and patient intensity.

Many organizations have difficulty identifying the actual available staff compared to the planned and current need. To fill a staffing need, organizations experience a flurry of phone calls, voice mails, emails, IMs, and texts as they attempt to fill that need. This activity creates communication gaps, isolates communication between individuals, and fails to provide transparency. Often organizations use staffing huddles to establish a unit-based list of staffing resources and associated needs. But this takes valuable resources (e.g., leadership, seasoned clinical providers) away from unit work to share their subjective interpretations of staffing needs.

Digital transformation in healthcare has created opportunities for organizations to communicate across service lines, divisions, campuses, facilities, and even the system through tools customized to the user's scope of responsibilities — providing transparent, real-time communication. Whether staffing is a shared responsibility or centralized in a staffing office, staffing dashboards can provide whole-house, objective views that capture both labor supply and demand for care. Staffing dashboards allow user-defined groups to evaluate staffing per necessary skill mix, job mix, and license and certification requirements. Minimizing staffing variances while meeting evolving care demands has a positive impact on patient outcomes and fosters an enhanced adherence to the organization's financial goals.

Clinical leaders must have access to objective data in order to make appropriate staffing decisions. Although not ideal, split shifts may sometimes be required to bridge the gap for a four-hour time slot. Ideally, staff are allocated to a shift for an eight- or 12-hour segment and decisions are made within one to two hours before the shift start. This provides ample time for both the receiving unit and allocated staff to prepare and time for units with unmet needs to regroup, plan for the upcoming shift, or send out a quick SMS text with a last-minute call for help. Automated scheduling captures these steps, allowing charge nurses to remain engaged on their care unit.

## Assess performance with productivity and analytics

A fair amount of healthcare staffing and scheduling happens in the moment, so it's also important to periodically take a step back and assess overall performance. Did you build a good schedule ahead of time? How did the department react in the moment? No labor management process is complete without reflecting on past performance and seeing how well it lined up with your productivity goals. And to be effective, this assessment needs to be timely. If you can only see results after the pay period, then that information is no longer actionable. Productivity data like labor hour data and actual workload metrics ideally should be available in real time and provide details on performance trends, giving you time to make adjustments and meet your goals.

While operational leaders need real-time, actionable information about their employees to guide in-the-moment decision making, back-office analysts and executives need broader views across the entire organization to assess trends, correlations, and outliers. This helps you refine and improve staffing and scheduling plans. Getting visibility into these larger trends can help shape budgeting for the next year and influence systemwide labor initiatives to improve overall performance.

Some of the metrics you can examine include those related to absenteeism, overtime use, and on-call and callback programs. Another key metric is unused capacity, which refers to when employees are not working to their full, hired FTE level. If you have large numbers of interchangeable employees who aren't working to their hired level and others who are earning overtime, that may be an indication that you don't have the right processes in place to pick the best person to fill a shift.



## Importance of standardization and a governance structure

Implementing centralized staffing and scheduling will benefit significantly from having a strong governance structure in place. A multidisciplinary team can help ensure that schedule and staffing rollout, education, and expectations are consistent and standardized. You don't want to create situations where staff apply their own interpretations or acquire others' bad habits. Consistency and standardization are key to equitable staffing and scheduling.

As you initiate the standardization process and support consistent use of policies and operational guidelines, you should identify and collate all the different processes and procedures that occur across departments. This will help you identify potential standardization challenges and consider current similarities when standardizing best practices across the organization.

To drive standardization and adoption, effective change management is extremely important. When you introduce a new technology or staffing and scheduling model, you're asking teams to alter the way they do things. You need to break down barriers and elicit positive behavioral changes that address these concerns. Effective change management helps you plan for transition, overcome obstacles, and drive new behaviors. To ensure your project delivers optimum value, your change management efforts should focus on four key areas:

### Speed of Adoption

How quickly staff is up and running on the new tools and processes relevant to their job roles

### Comprehensive Utilization

How many staff members are demonstrating buy-in and using the new tools and processes consistently

### Communication

Ensuring that staff understands why the change was made and how it will impact their roles

### Proficiency

How effective staff are once they have adopted the new tools and processes

## Putting it into practice

Over the past few months, we've talked to customers that have implemented a centralized staffing and scheduling model, are underway in their journey, or are starting the effort based on their experience during the pandemic. They've shared how important labor resource visibility across the enterprise is to be able to quickly and cost-effectively respond to unexpected surges and declines in volume — and how it will be even more crucial moving forward.

### BayCare Health System

For Florida-based BayCare Health System, the question was why did overtime costs continue to climb, even as employees' shifts were being canceled? BayCare needed a way to ensure that core staff was working to their appropriate employed equivalent — and limit overtime spend. The answer was a centralized scheduling model that delivered visibility across the system, allowing staff to be utilized effectively and resources redeployed as needed.

An internal mobile float pool gave BayCare plenty of resources to deploy throughout the system. “By providing visibility into staffing needs, we can understand where in the organization critical needs exist on a shift-by-shift basis, allowing us to shift those very critical resources to where they need to be and limit the need for high-labor-cost resources such as travelers,” says Melissa Winfield, System Nursing Operations Manager.

“We are on this path to create an enterprise model to support our mission of care by having the right staff at the right place at the right time. Our goal is to eliminate low census time and incentive spend, and decrease low census and overtime pay. But ultimately, our goal is to have the team that we need to care for our patients and understand the complexities that exist around staffing and scheduling.”

### Kingman Regional Medical Center

For this multi-campus healthcare system in Northeast Arizona, moving to a centralized staffing and scheduling solution allowed it to improve efficiencies. Access to complete information on employee skills, certifications, and other details allows the scheduling team to assign proper coverage and ensure timecards are updated consistently. And rather than spending time working out schedules, unit managers can focus their efforts on other important responsibilities, including patient care.

### Intermountain Healthcare

At Intermountain Healthcare, helping people in the Western U.S. live the healthiest lives possible has been made easier, thanks to its new centralized scheduling solution. Intermountain used to operate with more than 900 schedulers across its organization. Scheduling responsibility was rotated annually, which required constant training. Intermountain was also ready to implement employee self-service, which went hand-in-hand with centralized scheduling.

With its new system in place, dedicated scheduling and timekeeping coordinators manage schedules centrally, reducing the time spent on scheduling, increasing timecard accuracy, and best of all, letting clinical staff members go “back to the bedside,” according to Stacie Nelson, Solutions Architect, Care Transformation, Intermountain Healthcare. Shift labels and sign-up procedures are standardized across the organization, making it easier to manage a workforce that is deployed to multiple units. During a 10-day sign-up period held every six weeks, employees can select shifts, as long as they meet three predefined scheduling rules: Employees may not work more than 16 hours a day, six shifts in a row, or six days in a week.

“We have finally achieved a single source of truth with UKG. With coordinated governance and support from our executive team, only scheduling coordinators can edit schedules. Employees can use self-service, with defined limits.” Intermountain is even using self-service to schedule staff COVID-19 vaccinations, using the system to make sure that the managers, clinicians, and support staff required are available as well as taking advantage of reporting features to track vaccinations.

## Ecumen

Minneapolis-based Ecumen provides a range of senior housing options, from assisted living and short-term rehabilitation to long-term care, home care, and hospice, and manages a workforce spread across 40 communities. According to Brett Anderson, SVP, Chief Ecosystem & Operations Officer, each facility had its own scheduling process, ranging from commercial scheduling software to Excel to pen and paper. “As a result, we had no visibility into who was scheduled when, where, and why. And everything was retrospective — we couldn’t forecast or manage the hiring cycle effectively.”

Knowing the organization needed a better way, Ecumen assembled a governance team with executive sponsors who laid out a vision for the solution, with training and project support to ease its deployment across the organization.

With its new centralized scheduling solution, Ecumen has been able to standardize pay rules and pay schedules, allowing it to support a new float pool to better manage open shifts and call outs. The rollout began with the clinical team members, who make up 65-70% of Ecumen’s labor costs. Team members can use mobile and self-service to pick up shifts and check their information. Ecumen is already seeing positive results. “Even with the challenges of rolling out during the pandemic, we’re doing much better managing staffing to the census, we’ve made significant progress controlling our bonus program, and we’ve seen a great reduction in shift metrics like open shifts and time to fill shifts.”

“With our advances in scheduling and by partnering with UKG, we’ve put control of our team members’ schedules at their fingertips while supporting them with a 24/7 team of schedulers and staffers. As we’ve responded to COVID-19, we’ve been able to manage increasingly dynamic and fluid staffing challenges, proactively leveraging a singular process, actionable information, and dedicated team.”

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# Meet care demands today — and into the future — with a centralized solution

The pandemic has revealed the labor resource allocation challenges that many healthcare organizations have struggled with for years due to lack of visibility. Without visibility into the “whole house,” you simply can’t optimize the deployment of your workforce to minimize costs and improve care. Your clinical resources are precious and must be considered key organizational assets — caring for those patients most in need and being available for patients who are likely to need expert clinical resources based on trends, forecasts, and clinical knowledge. Now is the time to standardize staffing and scheduling processes and make changes that will benefit your organization well into the future.

It is important that your scheduling technology partner has extensive industry expertise, delivers an enterprisewide view and application of staffing resources, and has experience with healthcare organizations like yours. The ideal partner can assess the current and future state of your workforce, deliver reliable workforce data, and provide a modern scheduling solution that supports your vision across all departments and facilities within the organization. With the right technology partner, you can lay a strong foundation for effective, efficient, and consistent staffing and scheduling across your organization.

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## Glossary of terms

Patient refers to both patients in hospitals and residents in care facilities.

Healthcare organizations include hospitals, clinics, short-term rehabilitation, long-term care, assisted living, and hospice care.

## About UKG

At UKG (Ultimate Kronos Group), our purpose is people™. Built from a merger that created one of the largest cloud companies in the world, UKG believes organizations succeed when they focus on their people. As a leading global provider of HCM, payroll, HR service delivery, and workforce management solutions, UKG delivers award-winning Pro, Dimensions, and Ready solutions to help tens of thousands of organizations across geographies and in every industry drive better business outcomes, improve HR effectiveness, streamline the payroll process, and help make work a better, more connected experience for everyone. UKG has more than 12,000 employees around the globe and is known for an inclusive workplace culture. The company has earned numerous awards for culture, products, and services, including consecutive years on Fortune's *100 Best Companies to Work For* list. To learn more, visit [ukg.com](https://ukg.com).

### References:

1. McKinsey & Company, *How COVID-19 has pushed companies over the technology tipping point — and transformed business forever* (October 5, 2020), found at <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>.
2. Kaufman Hall, *National Hospital Flash Report: January 2021*, found at <https://www.kaufmanhall.com/ideas-resources/research-report/national-hospital-flash-report-january-2021>.
3. UKG, *Transforming Workforce Governance and Staffing Models to Withstand Crisis*, found at <https://www.kronos.com/resources/transforming-workforce-governance-and-staffing-models-withstand-crisis>.
4. HDMA, *Hospitals innovate to control labor costs* (October 1, 2019), found at <https://www.hfma.org/topics/hfm/2019/october/hospitals-innovate-to-control-labor-costs.html>.
5. Cleveland Clinic, *Cleveland Clinic Nursing Creates Centralized Staffing Operations* (April 3, 2019), found at <https://consultqd.clevelandclinic.org/cleveland-clinic-nursing-creates-centralized-staffing-operations/>.



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