



# Why (and how) **health care organizations** should **manage internal *and* external labor** by using the **same scheduling platform.**

**Fully optimizing your workforce requires the ability to manage all labor sources – including external vendors – from a single source that can generate full, end-to-end transparency into your workforce. A single, integrated solution is superior to dealing with multiple, separate products. Instead of struggling with every schedule, let the platform do it all. Here’s what such a platform needs to succeed.**

It’s never been more important, nor more difficult, to optimize health care staffing.

Since we published our paper “[The prescription for healthy staffing: Three straight-forward steps to optimize and maintain a healthy nursing workforce](#)” in 2015, the staffing crunch in health care has only gotten tighter. Today, the gap between open positions and available nurses has never been greater.

“Two years ago, approximately 30% of healthcare jobs across the nation went unfilled,” notes *Beckers Hospital Review*. “In 2016, per the [U.S. Bureau of Labor Statistics (BLS)], the percentage of unfilled healthcare job openings rose to 50%.”<sup>i</sup>

That’s the widest gap since the BLS started tracking this information. That, in turn, is forcing hospitals and health care groups to use more expensive staffing models. A 2016 study of nurses in Texas hospitals, for example, found that use of voluntary overtime had increased from 61% to 72.2% between 2014 and 2016 – at a cost of over \$64 million. Similarly, use of contract and traveling nurses has grown, but at an average of \$61.39/hour, they represent “the costliest method of interim staffing per hour.”<sup>ii</sup>

Voluntary overtime. In-house staffing pools. Contract/traveling nurses. Per diem nurses. Temporary staffing agencies. Even putting managers on the floor. The health care industry is desperate to improve staffing. Make it easier: integrate and consolidate all labor management into a single platform. With a single system that can incorporate all

labor sources alongside useful data like admissions, discharges, acuity, admitting diagnosis, etc., hospitals can align labor costs and workforce needs.

This is a missing ingredient from most hospitals, which have historically had to use multiple vendor management products, gone through one or more third-parties, or simply manually handled 10 or 20 or more different firms to fill their staffing needs.

Consultancy firm Deloitte’s *Human Capital Trends 2016* report says:

“Today, contingent, contract, and part-time workers make up almost one-third of the workforce [but] disparate time collection, labor procurement, scheduling systems, and contingent workforce management solutions do not provide the necessary insights. Disjointed and owned by separate business functions, these systems are tough to align with the new programs needed for the new workforce.”<sup>iii</sup>

But by integrating all labor management – full-time, part-time, contingent – into a single, smart system, front-line managers can predictively see how many resources are required to handle the level of acuity of an upcoming shift. Moreover, they can source the ideal, most cost-effective labor – all from within the same web-based system. But how does it actually work to integrate all staffing management – even external – into a single platform; and what do health care groups really gain from it, bottom-line? Those are the questions this paper will answer.

# 1: Integrate – an integrated platform is both workforce scheduling system *and* data warehouse, aligning costs and workforce needs.

In our "workforce optimization" paper, we wrote about ensuring that technology and policy work in tandem. Specifically, the technology used should incorporate both staffing rules (policy) and goals (minimizing overtime) in smart and predictive ways. The staffing platform should predict staffing needs by forecasting factors like acuity, and then recommend a schedule based on your roster of full-time and part-time staff (and possibly an in-house bench of contingent workers) in a way that meets all rules while controlling overtime and agency payments.

But to optimize fully, hospitals must incorporate the one missing piece: external contingent workers.

In other words, imagine that one of your staffing managers sits down with her tablet and looks at a forecast of staffing needs. She sees a gap (for an OR nurse for 13 weeks) that can't be filled with internal staff. Normally, she would then be forced to abandon the scheduling platform in order to contact and use one or more external staffing firms.

What if she could then contact and approve labor from one or more external staffing firms – right there in the scheduling system? What if, instead of wondering every day who to call to fill the next gap, she could simply log in and see the entire available bench – every possible worker, including those from external sources – for every shift and then just pick the best one, with a click?

That level of staffing optimization requires deep integration into all of the systems you use.

The scheduling platform must be able to pull common attendance, acuity, HR data, admissions and discharges, payroll information for overtime or for pay time off-balances, etc. When the integrated staffing platform can consume information from these other disparate systems – all of which hospitals already have, and which can be plugged in easier than most administrators realize – it becomes possible to generate relevant, real-time dashboards that answer the most urgent questions weighing on staffing managers.

## How integrating vendors into a single labor management platform works.

Let's say our staffing manager has one (or a hundred) openings over the next month, and internal resources are unavailable, insufficient, or would roll into overtime; so – rather than panicking or blowing the overtime budget – she logs into the single, integrated scheduling system.

From there, she can (1) see what workers are available from external staffing firms that have signed with the scheduling platform, and/or (2) simply post an order.

XYZ Nurse Staffing (which has been vetted by the scheduling platform as a qualified, credentialed, and licensed organization) logs into the same scheduling platform on their end. They see only the client orders that they're allowed to see, but in this case, they note the open order for a 13-week travel nurse in the OR. If they have OR nurses, they can upload them into the system and submit them through the software.

That goes right back to the hiring manager at the hospital group, who can then say, "Great, we'll take that one." All this happens fast and seamlessly through a single piece of technology.

It ensures hospitals have the nurses they need to care for patients, in advance. It eliminates all of the spreadsheets, back-and-forth phone calls, back-of-the-napkin notes, and the frantic last-minute scramble that characterize sub-optimal scheduling.

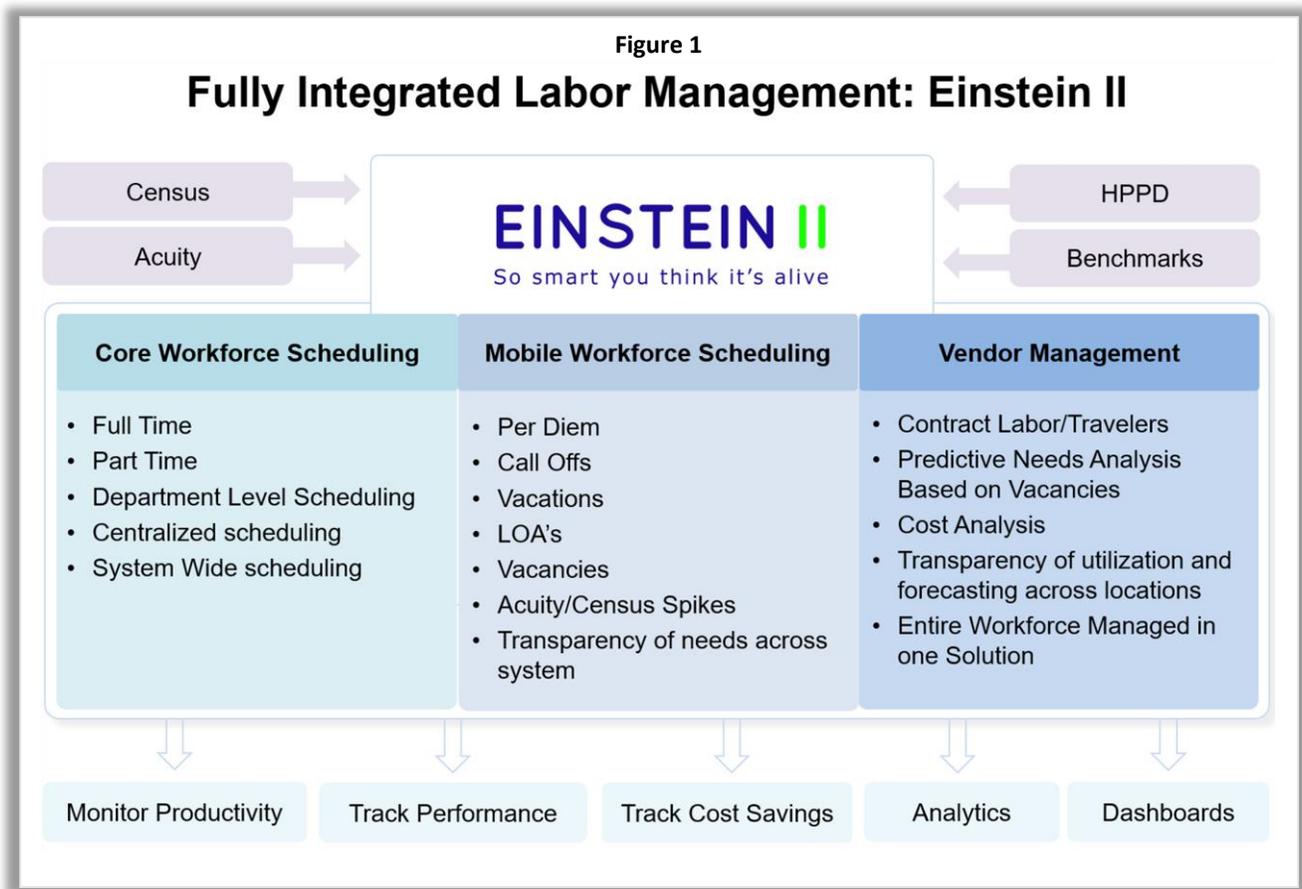
And it provides the ability to run a comprehensive expense report so that all labor costs can be viewed, evaluated, and understood.

The one system can then tell you when you need more or fewer resources, when you might want to send someone home (because census is low), or when you want to add people because the Admission Discharge Transfer System indicates patients sitting in the ER that will probably be admitted, and so on (see Figure 1 below).

It can also tell you not only when you need additional staffing, it can tell you when it makes sense to turn to an

agency. Vendor management is an integral part of the equation, but it can only be accurately factored if it is *also* integrated into all of this.

In other words, the integrated system delivers a level of insight and transparency never before available.



## 2: Unlock insight – offer greater transparency to managers and organizational leaders.

Integration unlocks insight. All too often scheduling is the result of guesswork; managers lack real-time factual data, so they make guesses with back-of-the-napkin calculations of "I have this many patients, with this kind of acuity, and this many are going home, and this many are staying." This

approach offers no way to validate the true needs and what the demand drivers are. Typical demand drivers for scheduling are: how sick are my patients, how many patients do I have, how many have appointments off the unit, how many are coming in, and how many are going out.

Integrating all of the systems into one scheduling platform is what reveals answers to those questions. The data to produce all of that information and insight is there, but sitting in isolation, unusable and unstructured.

As a result, many health care organizations go to their labor vendors and use an unnecessary number of contingent workers, or use them in unnecessary situations, because their practices leave them no other recourse.

That staffing manager with a need for an OR nurse, for example, may have no idea who is available, or may not have access to use another resource, especially if she's trying to fill the gap at the last-minute. With the transparency of an integrated system, she can get the full picture.

Even better, hospital executives and leaders gain more insight into their use of these different vendors:

- Which vendors are the most successful?
- Which one does the best job of filling your needs?
- What's the bill ratio?
- Who's giving you the best rate?
- Whose nurses show up and are really good?
- How long have those resources been here?

That last point is often particularly surprising to users. Have you literally used that agency nurse for a year straight? Why don't you just find a way to hire them?

Up to this point, no one has evaluated these kinds of staffing questions, because no one *could*. But not only can organizations now run deeply insightful reports based on real-time data, they can get predictive alerts to problems and sub-optimal staffing situations *before* they arise. With a single system serving as a consolidated data warehouse, hospitals can get all the reports and data they want – including insight into labor spend, utilization, and true productivity – from a single solution instead of three or four disconnected systems that force users to wrangle with Microsoft Excel or a similar, manually-driven bridge.

Thus, it becomes easier to run reports and analytics on labor spend and predict future expenditures – and gain insight *before* the money is spent. Furthermore, the data is made usable and actionable.

The result? As *Beckers Hospital Review* writes, “In healthcare today, these advanced processes driven by big data and algorithms are available to forecast patient demand up to 120 days in advance and strategically plan scheduling and staffing of clinical workforce.”<sup>iv</sup>

### 3: Predict – Identify problems, opportunities, and scheduling needs in advance; and find solutions, all from within the same platform.

When it comes to staffing, it's managers being reactive – and the subsequent erosion of staff retention and engagement – that frustrates hospital leaders.

Typically, managers will go out and post their six-week schedule out for, say, February into March. If they're short of staff and don't have all their positions full, they might post a schedule with open holes in it.

At the time of posting, that schedule is weeks out, so they forget about it and then get caught up worrying about the day's crises. But then suddenly February hits, and they're

scrambling for staff. That means: overtime and finding last-minute agency nurses (and last-minute placement can also be hard on agencies). Hospitals are trying to find *anybody* they can, which *both* costs the hospital group a lot of money *and* burns out their own staff (hello, turnover my old friend).

It's simply easier and always more cost-effective to purchase labor and to fill your needs ahead of time. Predictive staffing also makes it easier to standardize practices on how your organization purchases contingent staff through

the system. In fact, smart platforms can also make recommended schedules optimized per criteria set by the staffing manager. Instead of managers making their own one-off decisions and doing what they want, it now standardizes and systematizes the process (incorporating policy and technology in one) that could eat up hours of a managers time trying to fit the puzzle together. Automating that activity has been found to generate “a time savings of 7-15 hours per manager per pay period,” writes *Beckers Hospital Review*.<sup>v</sup>

With the rules of your organization built in, managers can make the best decision, faster, and take steps that will help retain staff and optimize their use.

In short, managing all staffing sources from a single platform is just the start. That platform also needs to be able to accurately predict and forecast labor needs.

Predictive modeling is what tells staffing managers that the ER will see 30% more patients on Fridays, after 3 p.m. especially if it's raining out. Traditional tools (e.g., Microsoft Excel) cannot handle this task.

With all of this information at its disposal – and the ability to use it to peer into future needs – the platform can then alert staffing managers and organization leaders to basically any deviation from their established staffing model.

Indeed, it shouldn't be left up to the user to have to ask for predictive intelligence.

A modern scheduling system should do the heavy lifting for the user and, *if* user intervention or awareness is required, trigger automatic alerts.

## 4: Notify – automatically generate alerts and notifications to staffing managers and hospital executives.

Predictive, smart scheduling platforms can alert hospitals according to almost any noteworthy situation, such as staff:

- Going into overtime;
- Going over a set number of hours due to the Affordable Care Act or other regulatory reasons;
- Not working up to FTE value or whatever hours are expected; *and/or*
- Losing their nursing or other license or certification (expired or going to expire within X days).

But the real power of automated alerts is combining them with predictive scheduling to solve potential problems long before they strike. For example, the platform can alert the user that in six weeks, they will likely have three open positions for which internal resources will be insufficient (not enough staff) or inappropriate (staff going into overtime). In that scenario, the alert kicks in and that manager can say, "Okay, we want to bring in a traveler or contract person because you have unfilled spots for three full time

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nurses.” With the vendors built into the system, the platform itself can recommend who to use, submit the request, and give the hospital one-click approval of the resource. These alerts are key to helping already overworked staffing managers better solve staffing crises weeks before they hit, instead of making poor decisions out of desperation.

## 5: Save – It may be hard to believe that something that can save money can also save lives, but the evidence is in the numbers.

### Delivering better patient care.

Matching staff levels to acuity alone has copious benefits for both organization and patients. For example, it avoids hospital days (i.e., reduces length of stay), adverse outcomes, and even patient deaths by the thousands, per a study published in *Health Affairs*.<sup>vi</sup>

But only by integrating all labor into a single system can users always see at a glance all of their people – and their credentials, certifications, licensures, etc. – to identify the best resource from any source. Many, many hospitals have core scheduling software; that’s not the question. The issue: can that software manage a float pool (i.e., vendors)?

If staffing managers have to do that manually, they don’t have true visibility and must spend valuable time calling multiple staffing agencies (who, as we mentioned, can struggle to fill last-minute needs themselves).

In the end, the manager will often default to the first available resource rather than the *best* available, just to save time. But instead of resolving the issue, that approach, at best, just downgrades crisis into problem.

Fundamentally, you cannot optimize staffing – or best serve patients – if it’s so much work to fill out a schedule that you take shortcuts.

### Lowering overall operational costs.

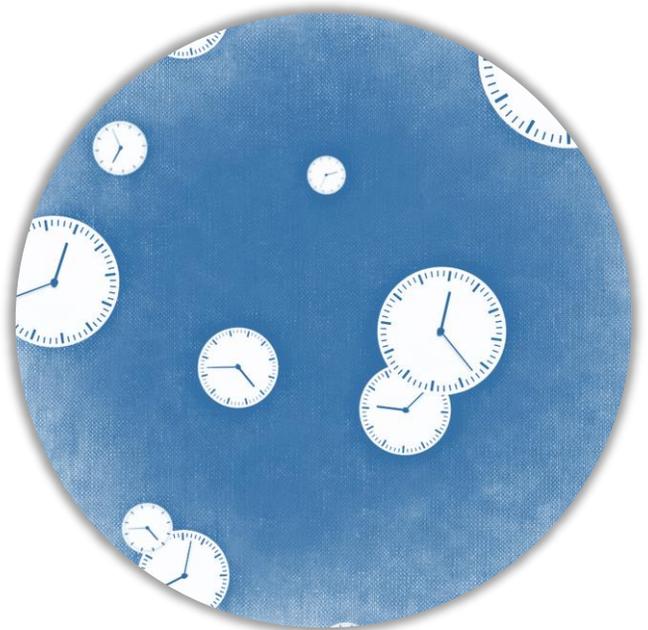
That suboptimal staffing, in turn, raises operational costs. The same *Health Affairs* study mentioned above also found significant cost savings from acuity-based staffing:

“When taking into account the cost of raising staffing levels

compared to cost savings linked to reductions in stays and adverse outcomes, the increased cost of adequate staffing nearly pays for itself.”<sup>vii</sup>

That’s not just theory: one six-hospital facility saved \$3.3 million over 3 years by switching to an automated, predictive scheduling platform.<sup>viii</sup>

In short, integrating labor makes it easier to control costs. It stops different managers from just calling up any agency they want and ordering staff, or scheduling excessive overtime. When temporary, contingent or per diem workers are needed, they’re right there, and the scheduling manager can always make the best choice possible.



# Conclusion: True workforce optimization depends on managing all labor from within the same single platform.

Scheduling is a major pain for hospitals especially large health systems with multiple locations. These organizations are facing serious shortages, rising costs, and incredible complexity (few industries must contend with such a complicated mix of worker types – FT, PT, contingent, temporary, traveling, agency, per diem, etc. – each of which can *then* vary in terms of availability, certifications, authorizations, and compensation models). The solution is workforce optimization, an ongoing process that is simply impossible if the vendor piece remains separate. As industry analysts at Deloitte have written, “[Health care] organizations will need new technologies, new ways of measuring costs, and even a new language of talent management for the 21<sup>st</sup> Century.”<sup>ix</sup> With vendors integrated into the labor management platform, the last piece of the puzzle clicks

into place. Suddenly, *all* staffing can happen from within a single, integrated system: no more juggling, no more manual labor to manage labor. The transparency and insight into staffing sharpens into crystal-clarity, and – combined with the predictive abilities of an AI-powered platform – hospitals can forecast and optimize labor costs weeks and even months in advance and then fill *all* open needs with a click. *This* is the workforce optimization that short-circuits problems before they escalate into emergencies and generates substantial cost savings and stronger managerial decision-making. The alternative is dealing with multiple parties in disparate segments, not talking to each other. With an integrated platform, all three segments can be sorted out with one system and one party.

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## About Hallmark Healthcare Solutions

Hallmark Healthcare Solutions is a global healthcare solution and IT firm with offices located in New Jersey, New York, Michigan, and India. Hallmark offers a unique approach inclusive of both strategy and technology to achieve the desired outcome. The technology component positions organizations to use real-time data for improved decision making with regard to leveraging human capital. Over the years, Hallmark has helped organizations optimize and save millions in labor expenses, improve their efficiency, and achieve fiscal responsibility through best-in-class software and strategic workforce solutions. Visit <http://www.hallmarkhealthcareit.com> for more.

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