# Scheduling Software Supports Cost-Saving Staffing Alternative

By Robert E. Blake, R.N.

ome analysts of the nursing labor market suggest that the long-running nursing shortage may be moderating, in part because of significant increases in prevailing wages paid to registered nurses. But the reality on the front lines of hospital administration is that recruiting, hiring, training, scheduling and retaining nurses continue to present difficult challenges. Memorial Hermann Health System in Houston has developed a solution to address two particular problems stemming from the nursing shortage: the costs and quality of external nurse agency staffing.

Over the past six years, Memorial Hermann has reduced the use of outside agency staff by 75 percent and saved a total of more than \$34.5 million. We have achieved these results by working with our nine acute care hospitals to switch to an internal supplemental staff resource pool and adopting one enterprise staffing and scheduling software system. Just as importantly, with an internal agency, Memorial Hermann ensures that only carefully screened, consistently oriented and trained, and appropriately credentialed and licensed nurses are scheduled.

# **Staffing and Scheduling Problems**

In 1999, the facilities in Memorial Hermann Health System used several different staffing and scheduling methods. Some still relied on manual processes; others used a software package but with varying levels of system implementation. Without using one system consistently, it was impossible for Memorial Hermann to manage staffing and scheduling strategically. Indeed, it was difficult to even get a clear picture of staffing and scheduling systemwide.

Outside nursing agency staffing at Memorial Hermann averaged about 60,000 RN hours per month, at a monthly cost of some \$2.4 million. In addition, external allied health

For more information about RES-Q Labor Resource Management from Res-Q Healthcare Systems, 1-800-572-1911 professional hours typically ranged from 15,000 to 20,000 hours per month at monthly costs ranging from \$750,000 to \$1

million. High use of outside agencies was not only a cost problem but also a quality issue. At the prevailing levels of external agency use, Memorial Hermann had scores of different nurses and other health professionals caring for patients in various departments each day. That created continuity of care problems. Agency staff were not uniformly screened or trained, and they varied in their understanding of Memorial Hermann policies and standards of care.

All the hospitals, and even individual departments, competed amongst themselves for agency staff, exacerbating the outside staff cost problem. Contract provisions and billing rates were inconsistent from hospital to hospital. The resulting confusion was difficult to understand and manage, seemingly impervious to efforts to centralize policies and procedures. For the finance department, just making sense of all the different contracts and billing rates to pay the agencies' monthly invoices was a time-consuming, grueling endeavor.

### Program Solution

Rising and uncontrolled outside agency use and costs, shrinking reimbursement rates and concerns about the quality of care and patient satisfaction combined to drive the decision to find a solution. In the fall of 2000, Memorial Hermann established Premier Staffing, an internal staffing agency. Premier Staffing operates 24/7 to provide staffing to all Memorial Hermann facilities. Today, Premier Staffing has a field staff of some 1,110 employees who are available to provide coverage on an as-needed basis.

Staff people who work through Premier Staffing are Memorial Hermann employees who are called field staff or "supplementals." Deploying internal staff resources in this way eliminates the substantially higher costs of outside agency staff. Moreover, with the supplementals, Memorial Hermann can provide relief to regular staff when the census increases, while avoiding the problems that arise when hospitals hire more regular employees but then have to cut staffing when the census changes.

### **Cost Savings**

From fiscal year 2001 through fiscal 2006, Premier Staffing has yielded \$34.5 million in cumulative net savings, averaging about \$5.75 million annually. In fiscal year 2006, systemwide savings reached a monthly average of \$1.04 million. The key to achieving these savings has been success in converting outside agency staff utilization to Premier Staffing. Premier Staffing's hourly pay rate for an RN is

\$39. The average agency billing rate charged to Memorial Hermann is \$52. Thus, just one RN FTE of Premier Staffing saves about \$27,000 annually, and the savings are even greater compared to the prevailing market average \$70 hourly bill rate for agencies in the local service area.

Premier Staffing has indeed been effective in working with the nine hospitals to rely on our internal supplemental resource pool and decrease use of external agency staff. Outside agency hours have fallen by a total of 75 percent since the program's implementation.

## Scheduling Software Critical to Success

To support Premier Staffing, Memorial Hermann implemented RES-Q Labor Resource Management consistently across all its facilities. It is an enterprise-wide, Windowsbased client/server system for staffing and scheduling. Me-

morial Hermann has approximately 500 licensed application users.

The software supports employee scheduling by translating hospital-defined workload standards into specific staffing patterns by employee skill level. The system automatically calculates optimal staffing for all units and departments by shift. It creates complete schedules for each unit

and department, based on defined staffing policies and employee preferences. The system also includes personnel management functionality with personnel profiles for each employee. Certification and license renewal dates, continuing medical education classes and credits, performance evaluations, salary histories, and special skill sets are among the types of data maintained. Thus, the RES-Q software helps Premier Staffing ensure that only properly credentialed and licensed health professionals are scheduled.

Having all the hospitals on the same scheduling system and sharing a common, unified database is essential. It enables Premier Staffing's managers to see where there are open shifts and unmet staffing needs across the entire system 24/7. The software is used to create "float tags," where open shift markers can be placed in the staffing system to identify specific staffing needs. This process is applied uniformly to all departments. With the markers, Premier Staffing can quickly create a master schedule of staffing needs and fill them, and schedules take just a few minutes to input with the software.

Moreover, we have an interface between the staffing and scheduling software and Memorial Hermann's time and attendance application. When an employee badges in at the start of a shift, his data downloads directly and automatically into the RES-Q system, and payroll data is captured with 99.5 percent accuracy. A second interface to Memorial Hermann's human resource system enables centrally maintained employee demographic data to be utilized, saving time and avoiding potential errors associated with duplicate, manual data entry.

Finally, the staffing and scheduling software's reporting capabilities have been very important. The data resulting from the application of the software is a strategic asset for identifying and resolving staffing and scheduling issues. Premier Staffing can accurately track and analyze staffing utilization across all Memorial Hermann facilities.

# **Quality Assurance**

Premier Staffing does more extensive pre-employment

testing than the typical agency, and it tests out nurses that many agencies would send to work at Memorial Hermann or other hospitals. Moreover, Premier Staffing supplementals go through detailed orientation and training.

Training includes participation in the annual assessment of specific required competencies unique to each facility

within the system. When new updates to current technologies are deployed, Premier Staffing provides education to keep staff current with ongoing changes. Further, a complete profile of credentials is retained on every employee, and this profile is made available on-demand by unit-based managers.

When Premier Staffing sends a nurse to a unit, the unit manager knows that we have scheduled a high quality, appropriately credentialed professional who understands and is committed to Memorial Hermann standards of care. In sum, via careful selection, thorough pre-employment testing, and detailed orientation and training, Premier Staffing consistently schedules qualified nurses in all hospital departments while lowering staffing costs for the overall enterprise.





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