

## Acuity Or Ratio: How Do We Properly Staff Our Organizations With Nurses?

By Barry P. Chaiken, MD, FHMSS

As the healthcare industry shifts to value-based reimbursement and the associated reduction in reimbursement rates, hospitals look to cut costs throughout their organizations. With labor accounting for more than 60 percent of all hospital costs –nurses, who make up the bulk of those costs – find themselves shouldering the burden of labor-related cost reductions. These cost cutting activities manifest themselves through a reduction in staffing, leading to a decrease in nurse-patient ratios and the employment of less experienced professionals at lower salary levels.

For more than a decade, the **federal government required hospitals accepting Medicare funding to** “have adequate numbers of licensed registered nurses, licensed practical (vocational) nurses, and other personnel to provide nursing care to all patients as needed.”

In 2004, **California became the first and only state to date to require**, by law, minimum nurse to patient ratios that must be maintained at all times by every care unit within a hospital. Seven other states require hospitals to maintain standing staffing committees responsible for plans and staffing policy (CT, IL, NV, OH, OR, TCX, WA), while five states require some form of disclosure and/or public reporting (IL, NJ, NY, RI, VT).

### Impact of the California law

The California nurse staffing law requires hospitals to maintain minimum nurse-patient ratios that varied by unit and ranged from 1:1 in operating rooms to 1:6 on psychiatric wards. **The legislation also requires** “hospitals maintain a patient acuity classification system to guide additional staffing when necessary, assign certain nursing functions only to licensed registered nurses, determine the competency of and provide appropriate orientation to nurses before assigning them to patient care, and keep records of staffing levels.”

The Agency for Healthcare Research and Quality authored a policy innovation profile that reviewed the medical literature to better outline the problems associated with low nurse-patient ratios and the benefits of the California law. They discovered numerous studies identifying the negative impact of low ratios on patient safety and patient outcomes including premature death and complications.

As to the impact of the California law, the agency discovered that California nurse staffing levels increased from 6.03 in 2003 to 7.11 in 2008, a level almost a half hour more than comparable hospitals in four other states without mandatory minimum ratios. In addition, they found fewer patient deaths, less burnout, higher job satisfaction, a reduction in workload and an increase in retention of nurses.

Although the evidence on its surface appears to support the notion that minimum nurse-patient ratios provide significant benefits to both patients and nurses, it remains unclear at what level those benefits accrue. Are the levels established by the California law optimum, or do they represent an average that might not be appropriate for every hospital, its wards, or its patients? Surely the acuity of patients in tertiary care or academic medical centers on average surpasses those seen in community hospitals. Without truly understanding the nursing burden of each patient and the skill set of each nurse, it is impossible to achieve adequate, evidence-based work assignments that protect and serve patients while efficiently assigning expensive professional staff.

Fortunately, the expansion in the use of electronic medical records provides the clinical content data that can help accurately drive patient acuity scoring. In addition, information technology exists to inventory professional skills. By combining these two technologies into an easy to use, graphically driven nurse staffing application, hospitals and their unit charge nurses could easily assign nurses to patients based on real need rather have their decisions driven by a statewide average. This would ensure the efficient assignment of nurses to deliver the highest quality patient care while allowing these organizations to thrive under value-based reimbursement.

### About the author

Barry Chaiken is the chief medical information officer of Infor. With more than 20 years of experience in medical research, epidemiology, clinical information technology, and patient safety, Chaiken is board certified in general preventive medicine and public health and is a Fellow, former Board member, and Chair of HIMSS. As founder of DocsNetwork, Ltd., he worked on quality improvement studies, health IT clinical transformation projects, and clinical investigations for the National Institutes of Health, UK National Health Service, and Boston University Medical School. He is currently adjunct professor at Boston University's School of Management where he teaches informatics. Chaiken may be contacted at barry.chaiken@infor.com.



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