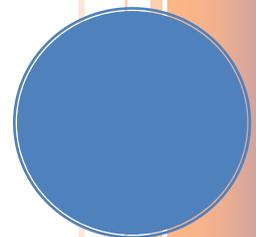


COMMUNITY HEALTH SYSTEMS, BARSTOW COMMUNITY HOSPITAL AND FALLBROOK HOSPITAL PATIENT CARE REPORT

This patient care report was compiled from documents written by registered nurses employed in direct patient care at CHS Hospitals: Barstow Community Hospital in Barstow, CA, and Fallbrook Hospital in Fallbrook, CA. All incidents reported herein are believed to be not only accurate in their particulars but also representative of common or typical assignments. All reporting is consistent with HIPAA guidelines

National Nurses Organizing Committee



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COMMUNITY HEALTH SYSTEMS, BARSTOW COMMUNITY HOSPITAL AND FALLBROOK HOSPITAL PATIENT CARE REPORT

Key Findings:

- High Nurse turnover, reliance on registry RNs, and inadequate skill mix between experienced and newer RNs at both hospitals compromise patient safety
- Inadequate staffing levels are routinely present, placing patients at risk of harm on a daily basis
- Patients who are most vulnerable, requiring the most nursing care, are at the greatest risk of harm
- Staffing patterns are in violation of the California Nursing Practice Act
- Nurses are forced to work in conditions that do not allow them to practice in accordance with the California Nursing Practice Act
- Nurses are harassed, bullied, intimidated and threatened when reporting unsafe patient care conditions

About this Report

Community Health Systems (CHS) nurses at Barstow Community Hospital in Barstow, CA, and Fallbrook Hospital in Fallbrook, CA should be commended for their commitment to the safety of their patients, for fulfilling the legal duties placed upon them by the California Nursing Practice Act, and for adhering to professional ethical standards requiring them to advocate for their patients. As a condition of their licensure, RNs must object to any assignment that the nurse determines to be unsafe or potentially unsafe. It is the legal and ethical duty of registered nurses to ensure safe, competent, therapeutic and effective care for every patient at all times. This patient care report is a representative summary of unsafe staffing reports submitted by CHS nurses over the last 14 months.

The unsafe staffing report form, or Assignment Despite Objection (ADO) form, is a tool for nurses to identify and track professional practice issues within the hospital when a nurse objects to an unsafe, or potentially unsafe, patient care assignment. ADO forms are signed by the nurse or nurses who file them and shared with the supervisor on duty. CHS management in both facilities has refused to accept these forms. In every case, however, nurses have communicated their objections verbally. Under protest, registered nurses then attempted to carry out their assignments under adverse circumstances.

CHS nurses have been struggling to resolve unsafe working conditions, particularly dangerous staffing levels, which have resulted in the filing of nearly 50 ADO reports from May 2012 to August 2013. (Appendix A) These reports specify instances where patient safety was compromised. However, not every incident of short staffing or unsafe patient care is documented. Nurses fear retaliation and reprisal by supervisors or administrators for reporting unsafe conditions. In addition, some reports have been suppressed to protect patient privacy as required by HIPPA. Therefore, the number of actual unsafe situations is significantly higher than reported. Nevertheless, the number of unsafe staffing reports continues to grow, reflecting that, the quality and safety of patient care in both CHS facilities remains severely compromised.

While high RN turnover affects patient safety at both hospitals, each has a core of RNs who are lifelong residents of communities in which CHS hospitals provide services; some have worked at their hospital for their entire career. These RNs have noticed a dramatic decrease in standards since CHS took over operation of their hospital. The emphasis has changed from providing quality patient care to “doing more with less.” It is evident after reviewing the reports from nurses that the rationing of nursing care has had a detrimental effect on patient care and safety.

About Community Health Systems

Community Health Systems (CHS) is a national, publicly traded for-profit hospital corporation. “The organization's affiliates own, operate or lease 135 hospitals in 29 States, with an aggregate of approximately 20,000 licensed beds. In over 55 percent of the markets served, CHS-affiliated hospitals are the sole provider of healthcare

services.”¹ CHS is the second largest for-profit hospital chain in the United States, and one of the wealthiest. Over the past five years, CHS reported over \$1.5 Billion in profits to the Securities Exchange Commission.

CHS has carefully crafted a marketing scheme that masks its corporate identity from the communities where they do business. In most cases, the corporation takes over a community hospital that has an excellent reputation for quality care but keeps its corporate name carefully hidden. Shortly after acquisition of a community hospital, CHS’s first step is often to eliminate unprofitable services even though they are needed by the community, such as women’s health, pediatric care, and labor and delivery units. The CHS business model eliminates needed healthcare resources from the community. In addition, CHS is under investigation for fraudulently draining monetary resources to enhance corporate profits.

Medicare Fraud

CHS is the subject of a U.S. Department of Justice (DOJ) investigation into allegations of Medicare fraud. A brief history:

2005: Whistleblower Robert Baker files lawsuit against CHS alleging improper donations to state leading to inappropriate federal Medicare funds

2009: The DOJ joins lawsuit against CHS alleging \$47.6 Million Medicare fraud in New Mexico

2009: Former employee at CHS affiliated Lutheran Hospital in Indiana files lawsuit alleging millions in Medicare fraud

2011: The DOJ consolidates multiple probes of illegal practices by CHS into one Federal investigation. CHS is alleged to have admitted patients who did not meet the Medicare standards of admission

2013: The DOJ subpoenas two high ranking CHS officials as part of its ongoing investigation

CHS Mission Statement and Goals

Each CHS hospital has prominently displayed mission statements and goals in its marketing materials. By contrast, CHS corporate materials tout its return on investment and valuable stock price. CHS owes a duty to Wall Street but RNs owe a professional duty to their patients. Nowhere does CHS state that its objective is to provide safe care to patients. RNs at both facilities support the mission statement of their respective hospitals and seek to hold the company accountable to these mission statements. Mission statements are described on each hospital’s website as follows:

- Fallbrook Hospital RNs support the mission to “strive to exceed patient expectations, while delivering compassionate, quality care.”
- Barstow Hospital RNs support the hospitals stated mission as follows :

- We aspire to earn a reputation among patients as offering high quality, technologically advanced and compassionate medical care in a safe and clean environment.
- We aspire to earn a reputation among the medical staff as being responsive, proactive, open and trustworthy in support of physicians who practice evidence-based medicine, employ best practices, and commit to achieving optimal patient outcomes.
- We aspire to earn a reputation among staff as an employer that recruits and retains the best employees; fosters teamwork, respect and professional growth; and rewards and recognizes employees for their individual and collaborative contributions.
- We aspire to earn a reputation among the community-at-large as a vital and valued community resource, the preferred hospital provider, and a civic-minded community leader.

Chronic Patient Safety Concerns at CA CHS Hospitals

Staffing

Nurses are ever present with their patients. In fact, the primary reason that patients are admitted to hospitals is to receive nursing care. When RNs do not have enough time to care for patients, patients are put at unnecessary risk of adverse outcomes. One such risk is the so-called “failure to rescue.” “Because nurses are often the first to detect early signs of possible complications, their vigilance makes timely rescue responses more likely.”²

RNs at both CHS facilities have serious concerns for the safety of their patients. Inadequate RN staffing, lack of support staff, inadequate training, high RN turnover, over-reliance on registry, traveler and new graduate RNs, and inadequate equipment all contribute to higher RN workloads. Higher nurse workloads are associated with more patient deaths, complications, and medical errors.³

When RNs are unable to follow the laws guiding nursing practice, it not only jeopardizes patient safety but also each nurse’s state license. California’s Title 16, the regulations for the Nursing Practice Act, clearly states the standards of nursing care. Thus, in CHS hospitals nurses are accountable for the care they provide but are powerless to influence the decisions that surround nursing practice. Neither of these CHS facilities takes into consideration the individual needs of the patient when deciding the amount of nursing care that they will receive, as is required by California Health and Safety Code Section 1276.4 (b) (see inset).

California Health and Safety Code Section 1276.4

(b) states, “These ratios shall constitute the minimum number of registered and licensed nurses that shall be allocated. Additional staff shall be assigned in accordance with a documented patient classification system for determining nursing care requirements, including the severity of the illness, the need for specialized equipment and technology, the complexity of clinical judgment needed to design, implement, and evaluate the patient care plan and the ability for self-care, and the licensure of the personnel

In addition to inadequate RN staffing, nurses report that there is inadequate support staff, such as nursing assistants, unit secretaries, transporters, and environmental service employees. This creates additional strain on the quality of nursing care that patients receive because the RN then becomes responsible for these additional duties.

Nurses have repeatedly brought these concerns to the attention of administration and have been repeatedly ignored. In many cases, RNs face hostility when they bring these concerns to the attention of CHS management. Such hostility is misplaced; nurses seeking to fulfill their professional duties are merely advocating for quality care for their patients.

Dangerously high patient loads cause delays in nursing assessment, delays in the administration of tests and medications, significant changes in patients' hemodynamic status which go unnoticed and uncorrected, poor patient outcomes, patient falls due to lack of available assistance with ambulation, and increased infection risks. In addition to safety concerns, basic human dignity is being neglected. For instance, patients are left in soiled beds until staff can address these basic human needs—sometimes hours after they should have been taken care of.

The ADOs submitted by RNs at these CHS facilities document unsafe near misses, attempted suicide, and patients removing their breathing tubes and IVs. All of these incidents would have been prevented if CHS had responded to nurses' safety concerns and provided adequate staffing. It is evident from the ADOs that patients are being harmed by CHS' refusal to act.

RN understaffing is dangerous and unacceptable. It contributes to hospital morbidity, mortality, and medical errors. It is outrageous from a patient safety standpoint, and drives up healthcare costs. Most importantly, adverse patient outcomes take a significant emotional and economic toll on those who are harmed. Research studies show that poor staffing contributes to millions of preventable complications for patients and causes tens of thousands of preventable deaths each year.

CHS in these two hospitals has willfully engaged in practices that place patients at risk of harm while inflating corporate profits. Its practices violate National and State standards of nursing practice. When these concerns have been brought to the attention of CHS administrators by registered nurses, they have been dismissed, or ignored, and the nurses retaliated against. Based upon review of ADOs, the most vulnerable patients, those who require the most nursing care, are at greatest risk.

"Nurse satisfaction with many aspects of work increased significantly between 2004 and 2006. The largest changes in satisfaction, in percentage terms, were with adequacy of staff (a 12.95 % increase), providing patient education (+7.3%), clerical support (6.9%) and satisfaction with the job overall (5.9%)." - **Nurse Satisfaction and the Implementation of Minimum Nurse Staffing Regulations, Joanne Spetz, Ph.D, Policy, Politics & Nursing Practice, April 3, 2008**

RN Turnover, Over-Reliance on Registry / Traveler RNs and Inadequate Skill / Experience Mix

Adequate staffing is the most important factor in reducing RN turnover (see inset). *RN turnover is both a “bottom line” barometer for RNs’ collective satisfaction with their ability to provide safe care in a given hospital, and a variable that has in itself a negative effect on the quality of care delivered to patients.*

A statewide survey of nurses in California found that nurses perceived a significant improvement in their working conditions and were more satisfied with their jobs in the two years following implementation of the landmark California staffing law in 2004. The aggregate RN turnover at the two CHS Hospitals is more than twice the national average for similar hospitals.⁵ At Barstow Community Hospital turnover is almost three times the national average, with 23 of 81 RNs who have been hired in the last year alone – a 29% turnover. Fallbrook Hospital RN turnover in the past year has been close to twice the national average for similar hospitals, and almost 50% in critical units like ER and the Women’s Center.⁶ One third of Fallbrook RNs have been hired in the last two years. With area hospitals already recognizing RN Professional Practice Committees (See “Solutions” below), two new acute care facilities opening in the next year, and many of their colleagues expressing a desire to move on, long-term Fallbrook RNs fear an acceleration of this already alarming trend.

CHS Responds with Hostility

When RNs report their concerns to hospital administration, they are met with responses ranging from blatant disregard to overt hostility. This pattern has been uniform and systematic in both these CHS facilities demonstrating an institutional practice of ignoring threats to patient safety. Nurses are not only ignored but also bullied, intimidated, and threatened with retaliation when they report unsafe conditions.

These responses are clearly unprofessional and disrespectful but in a healthcare setting they can be detrimental to patient safety and outcomes. According to the Joint Commission, “intimidating and disruptive behaviors can foster medical errors, contribute to poor patient satisfaction and to preventable adverse outcomes, increase the cost of care, and cause qualified clinicians, administrators and managers to seek new positions in more professional environments. Safety and quality of patient care is dependent on teamwork, communication, and a collaborative work environment. To assure quality and to promote a culture of safety, health care organizations must address the problem of behaviors that threaten the performance of the health care team.”⁷

CHS promotes a culture of hostility rather than adopting a “zero-tolerance” for such disruptive behavior as is recommended by researchers and patient safety advocates.

Every nurse is entitled to a workplace that is free from hostility. Every patient has a right to a care environment that promotes a culture of safety.

Solutions

Nurses at both of these facilities seek interventions that would remedy the dangerous care conditions and hostile work environment. In the spring of 2012 nurses from each facility voted for representation by the California Nurses Association (CNA), National Nurses United (NNU), so that they could collectively bargain with CHS. The vote in favor of union representation was driven almost entirely by patient safety and RN-retention concerns.

It is the desire of the RNs to form Professional Practice Committees that will examine ADO reports and make recommendations to improve patient care in their hospitals. Further, RNs seek enforcement of RN-to-patient ratios based on patient need as determined by the individual professional judgment of the RN. These recommendations are consistent with the California Nursing Practice Act.

At CHS facilities, critical care RNs are often required to respond to emergencies in other units. It is well documented that understaffing in the ICU can cause serious harm to patients. For example, “adding just one full-time RN on staff per day resulted in 9 percent fewer hospital-related deaths in intensive care units.”⁷

Unit-Specific Patient Safety Concerns

Emergency Care

In facilities like Barstow Community Hospital and Fallbrook Hospital where there are no other acute care hospitals in town, emergency care is particularly critical.

Turnover and Skill Mix

Turnover in these critical units is particularly high. At Fallbrook 39% of the ER RNs were hired in the last year, at Barstow 35% hired in the last year – both over three times the national turnover average for similar hospitals. This number greatly underestimates the need for experienced staff RNs in the Barstow ER night shift, where at one point the staff consisted of approximately 2/3 registry or traveler RNs.⁹

Examples from ADOs of over-reliance on registry RNs and/or failure to orient registry RNs (see sidebar):

- On one shift a traveler RN discharged a patient who had not received all ordered medications.

“... threats to patient safety are theorized to arise, in part, because temporary staff are less familiar with a nursing unit and a health care organization’s overall structure, policies, practices, and personnel—including information systems, facility layout, critical pathways, interdependency among work components, ways of coordinating and managing its work, and other work elements. This can be compounded when temporary workers do not receive the same level of orientation and training from the organization in which they provide care as do the organization’s employees.” - **2004 IOM Report *Keeping Patients Safe: Transforming the Work Environment of Nurses***.

- A registered nurse reported that traveler RNs who have neither received sufficient orientation to the ER nor had their competency validated by the hospital are repeatedly assigned to patients in the emergency department

This winter's mass exodus of staff RNs from the Barstow Community Hospital is more than just a "bump in the road." Barstow Community Hospital ER has been forced to – or decided to – rely on new graduate RNs to fill the holes in full time ER staffing positions.

A study of new graduate RNs who were given full patient loads found: "More than 55 percent reported that they had to work too fast; 33 percent reported having little time to get things done and nearly a third of new grads reported they had too many patients to get their job done well. Not surprisingly, as a result of these conditions, more than 37% of the new nurses say they plan to leave their current job in the next two years, and more than 41% say they, if free to do so, would take another job immediately." The authors of the study concluded that the data "raises the concern that employers will not be able to retain them in the acute care settings where they start out."¹⁰ Barstow Community Hospital's management practices have set the stage for an ER staffed by a revolving door of inexperienced and/or registry RNs, compromising patient care.

"Novice nurses still honing their skills in patient care and time management will be particularly vulnerable, but an excessive patient load can overwhelm even the most experienced nurse. On units with novice nurses, the more experienced nurses serve as "safety checks" by being available for consultation and, perhaps even more importantly, by looking over the novice's shoulder and observing her patients for early signs of distress. When a nursing unit has too few experienced nurses relative to inexperienced nurses and when those experienced nurses are overburdened, it become less likely that complications will be detected in a timely manner. - Sean P. Clarke, PhD, RN, CRNP, CS, and Linda H. Aiken, PhD, RN, FAAN, FRCN "Failure to Rescue" AJN January 2003

Emergency Staffing

The maximum staffing ratios in an Emergency department is 1:4, 1:2 for RNs caring for Critical Care patients, and 1:1 for RNs caring for critical trauma patients. RNs have documented nearly constant understaffing in the Barstow ER, including misuse of charge and triage RNs, and lack of support staff

Examples of ADOs documenting violation of acuity based staffing ratios:

- Due to the unit being staffed mostly by registry RNs, the only regular staff RN on duty was assigned to four high-acuity patients - two critical care patients with orders to be admitted to ICU and two with orders to be admitted to Med/Tele with continuous cardiac monitoring. Patient safety was compromised despite the RN missing her meal and break periods and working overtime.
- An RN reported being assigned a trauma patient with multiple stab wounds with an extreme acuity level. The patient required continuous modification to the plan of care based on the RN assessment. It was not possible for the RN to provide care for the other 3 patients she was assigned. Other RNs with their own 4

patient assignments did the best they could to provide care for those other three patients resulting in compromised patient safety and a patient fall.

- An RN reported she was assigned a patient with a high severity of illness needing to be restrained to prevent the patient from interfering with treatment and self harm. That patient required 1:1 constant care by a competent RN. In addition that nurse was responsible for two other patients.

The registered nurse assigned to triage patients shall be immediately available at all times to triage patients when they arrive in the emergency department. When there are no patients needing triage, the registered nurse may assist by performing other nursing tasks. The registered nurse assigned to triage patients shall not be counted in the licensed nurse-to-patient ratio. - **Title 22 Section 70217(a)(8)**

Examples of ADOs reporting inappropriate use of charge and triage RNs:

- An RN reported being assigned responsibility for all triage nurse functions while also assigned to five patients cared for by LVNs. This RN was the only staff member competent in “Mercy Air” and “Desert Ambulance”. There were 5 transfers during the shift and this RN had to assume responsibility for completion of documentation and all transfer protocols as to all five.
- RNs reported to the supervisor that the charge nurse was forced to take two patients, including a new admit.

Charge Nurses shall be included in the calculation of the licensed nurse-to-patient ratio only when engaged in providing direct patient care. When a Charge Nurse is engaged in activities other than direct patient care, that nurse must not be included in the ratio. - **Title 22 Section 70217(a)**

Examples of ADOs describing lack of support staff or equipment impacting RN patient care:

- An RN reported that she is regularly sent from the unit to transport by her/himself very high acuity patients to ICU for ongoing critical care. If one of the patients had a cardiac or pulmonary emergency during the trip, one person would not be sufficient to perform CPR, and the patient could die.
- An RN reported that no clerk was provided for the ER that night so nurses had to answer the phone and perform all clerical duties. Care was delayed.
- RNs reported that care was delayed because the housekeeper’s paging system was not working. The housekeeper was also overburdened. Patients could not be placed in dirty rooms and beds.
- RNs reported that they didn’t have enough blood pressure machines in the ER. Care was delayed because nurses had to wait for another nurse to finish using and then clean the machine.

Women’s Center: Labor and Delivery / Post Partum / OB GYN

Registered nurses are critical to providing safe nursing care to mothers and babies. Similar to the Emergency Department, safe care in the Labor and Delivery Department is especially critical in hospitals like Barstow and Fallbrook where there are no other acute care hospitals in town.

Laboring women need the support of a skilled, empathic, and intuitive nurse at the bedside who is coaching them, reassuring them, and most importantly, monitoring the health of the mother and the unborn baby. A woman who has been having a slow labor may suddenly make rapid progress, or subtle signs of fetal distress can arise. The nurse must be present and available to perform interventions as needed for the health and safety of the mother and her baby. Complications surrounding labor and delivery can have devastating effects on both mothers and infants.

Fetal distress, a sign of hypoxia, must be recognized and treated with the utmost urgency or permanent, irreversible brain damage can occur.

CHS nurses from these two hospitals report that high turnover and lack of experienced staff RNs in the Labor & Delivery, Post-Partum, and newborn nursery care areas of their hospitals pose a threat to patient safety. RNs report that the Women’s Center was staffed with new graduates or registry RNs without adequate obstetric experience available to assess patients. Many times, the OB unit was staffed solely by an inexperienced RN who must oversee care with no one available to consult in an emergency.

When an obstetrical emergency occurs, the intervention of a skilled, experienced RN translates into lives saved and permanent disability prevented. Indeed, "no age group is more susceptible to asphyxia or is as frequently in need of resuscitation than the neonate."¹⁰ Several studies have found a strong relationship between high cesarean section rates and a lack of experienced OB RNs. According to one such study, the number of direct-care RNs and the experience level of RN staff play a vital role in preventing unnecessary Cesarean sections.¹²

ADOs routinely document severely inadequate staffing. Staffing levels not only violate the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) guidelines for staffing (Appendix C), but on occasion (see ADO report below) they are also blatantly illegal, violating Title 22 maximum nurse to patient ratios. According to

“The licensed nurse-to-patient ratio in a postpartum area of the perinatal service shall be 1:4 mother-baby couplets or fewer at all times. In the event of multiple births, the total number of mothers plus infants assigned to a single licensed nurse shall never exceed eight. For postpartum areas in which the licensed nurse's assignment consists of mothers only, the licensed nurse-to-patient ratio shall be 1:6 or fewer at all times. The licensed nurse-to-patient ratio in a combined Labor/Delivery/Postpartum area of the perinatal service shall be 1:3 or fewer at all times the licensed nurse is caring for a patient combination of one woman in active labor and a postpartum mother and infant. The licensed nurse-to-patient ratio for nurses caring for women in active labor only, antepartum patients who are not in active labor only, postpartum women only, or mother-baby couplets only, shall be the same ratios as stated in subsections (3) and (4) above for those categories of patients.” – CA Title 22 Section 70217(a)(5)

national standards, staffing for patients in labor should be two or fewer patients per RN.

Example from an RN Report:

- An RN working alone in Post Partum Section of the Women’s Center was assigned 4 couplets and 2 adult patients for a total of 10 patients in a unit where the maximum ratio mandated by law is 1:4 couplets or 1:6 women only. Additionally, the registry RN working alone in Labor and Delivery was assigned 3 patients, one of whom was in Active Labor. The maximum ratio mandated by law for an RN assigned a patient in Active Labor is 1:2 and best practice is 1:1. When RNs raised staffing concerns, the supervisor responded that she “had had it” and “I stick up for you all the time.” In the past, RNs calling a supervisor’s attention to the 1:4 couplet ratio had been told, wrongly, that the ratio was 1:6 couplets.

Title 22 section 70217(b) states that “In addition to the requirements of [the minimum ratios] the hospital shall implement a patient classification system... for determining nursing care needs of individual patients that reflects the assessment, made by a registered nurse as specified at subsection 70215(a)(1).” **Title 22 § 70215** makes it clear that all patients must be assigned to a registered nurse.

Acute Medical /Telemetry/Step-Down

With the changing healthcare environment, the acuity of patients admitted to hospitals steadily increased and caused an increase in the demand for critical care beds. With the increased demand and decreased availability of critical care beds, patients were often transferred from critical care units while still requiring an increased level of nursing care and vigilance. Patients admitted to critical care units five to ten years ago are now routinely admitted to telemetry units.

These units are part of the continuum of critical care and named Telemetry Units Progressive Care units, Intermediate Care Units, Direct Observation Units, Step-Down Units, and Transitional Care Units.

The patients cared for on these units are moderately stable with less complexity, require moderate resources and require intermittent nursing vigilance or are stable with a high potential for becoming unstable and require an increased intensity of care. The patients are classified as having a decreased risk of a life-threatening event, increased stability, and an increased ability to participate in their care as compared to critical care patients.¹³

National Nurses United defines these units as “Telemetry Units” and “Step-Down Units”:

“Telemetry Unit” is defined as a unit organized, operated, and maintained to provide care for and continuous cardiac monitoring of patients in a stable condition, having or suspected of having a cardiac condition or a disease

California Health and Safety Code Section 1276.4 (b) states, “These ratios shall constitute the minimum number of registered and licensed nurses that shall be allocated. Additional staff shall be assigned in accordance with a documented patient classification system for determining nursing care requirements, including the severity of the illness, the need for specialized equipment and technology, the complexity of clinical judgment needed to design, implement, and evaluate the patient care plan and the ability for self-care, and the licensure of the personnel required for care.”

requiring the electronic monitoring, recording, retrieval, and display of cardiac electrical signals.

Step Down

A "Step Down unit" is defined as a unit which is organized, operated, and maintained to provide for the monitoring and care of patients with moderate or potentially severe physiologic instability requiring technical support but not necessarily artificial life support. Step-Down patients are those patients who require less care than intensive care, but more than that which is available from medical/surgical care. National staffing standards for step-down patients require three or fewer patients per RN.

The most common patient safety concerns reported by RNs in Acute Medical /Telemetry/Step-Down units are the failure to take patient acuity into account, or "staffing to numbers." This practice, common in the CHS hospitals, puts patients at risk by eliminating the critical role of RNs' professional judgment.

Example from an actual ADO Report:

- Two direct care RNs, a charge nurse, and a unit clerk were charged with the care of ten patients. Each RN was assigned to five patients, despite the following list of overlapping acuity-related conditions that should have been taken into account in staffing decisions:
 - Some of the patients required continuous cardiac monitoring so met the definition of telemetry patients and should have been staffed at four or fewer patients per nurse.
 - One of the patients was a child. The pediatric ratio is four or fewer patients per nurse.
 - One of the patients needed very frequent pain assessments with intravenous pain management.
 - One of the patient was not in a stable condition suffering respiratory and integumentary decomposition.
 - Two of the patients required isolation.
 - Two of the patients required frequent management of diabetes including blood sugar measurement, PRN insulin administration, and extensive teaching.
 - Three of the patients were totally dependent on the nursing staff for activities of daily living (ADL), mobility, and safety and required multiple interventions. These patients could not cooperate with their care or were confused.

"The link between health care worker fatigue and adverse events is well documented, with a substantial number of studies indicating that the practice of extended work hours contributes to high levels of worker fatigue and reduced productivity. These studies and others show that fatigue increases the risk of adverse events, compromises patient safety, and increases risk to personal safety and well-being."
The Joint Commission Sentinel Alert of December 14, 2011.

The assessments made by the registered nurses determined that the patients should be staffed at three patients per nurse.

Operating Room (OR) and Post Anesthesia Recovery Room (PACU)

RNs in the Surgery Units in Barstow Hospital have reported concerns about sufficient rest between shifts.

Examples from ADOs:

- A registered nurse reported having to work twenty hours continuously. Surgeries were booked at the same time requiring the hospital's only C-Arm. The nurse clocked out at 2:00 am. Then with the entire crew that nurse had to return at 7:00 am to work ten hours, This nurse worked 20 of 35 hours.
- A patient from the OR who should have been in the ICU was cared for in recovery (PACU) for 12 hours. The reporting RN worked overtime to care for the patient and then was on call for the next two days. A call back would have resulted in insufficient rest between shifts. Further, PACU beds are not licensed beds and therefore, patients may not be housed in the PACU until a bed becomes open for them.

Critical Care (ICU)

Critically ill patients are highly vulnerable, unstable and complex, thereby requiring intense and vigilant nursing care. Critical care nursing is that specialty within nursing that deals specifically with human responses to life-threatening problems.

The care of critically ill patients is intensive, critical and complicated, often with extreme variation from routine care. In many cases, RNs are literally controlling breathing, heart rate and vital functions of their patients. Patients require vigilant ongoing assessment and complex decision making with the clinical judgment skills of an expert RN. It is essential for critical care units to have at least one competent critical care RN for 1:1 nursing available at all times.

RNs have repeatedly reported to management two chronic problems in the ICUs – affecting the Medical Surgical and ER units at the CHS hospitals which could be easily and inexpensively resolved: lack of adequate staffing/equipment for telemetry monitoring, and lack of sitters for patients requiring suicide watch or physical observation. It is indicative of the need for an RN Professional Practice Committee that CHS management has so little regard for bedside caregivers' professional judgment that it has ignored these repeated warnings and the very simple solutions RNs have proposed

Examples from ADOs affecting ICU alone:

- In several cases, a patient who had attempted suicide previously that day and had verbally

The Joint Commission recommends that hospital should "Redouble efforts to reduce the use of physical restraint and therapeutic hold through the use of risk assessment and early intervention with less restrictive measures." **Sentinel Event Alert, November 18, 1998**

expressed since being admitted her/his abiding desire to kill her/himself was assigned to an ICU RN who had another Critical Care patient and could not provide adequate supervision for a Suicide Watch. In at least one case, the RN felt compelled to physically and chemically restrain the patient - a dehumanizing and unnecessarily traumatizing experience – when adequate staffing would have provided an alternative. The supervisor in this case mocked the RN’s concern, asking “can he/she get to a bunch of pills and take them? Is he/she able to get to a train to run him/her over?”

- In another instance, an RN reported that a sitter had been sent home when the spouse volunteered to stay with the patient. The patient pulled out the nasogastric tube. The supervisor who sent the sitter home stated that she/he was not aware of the physician’s order for a sitter
- An RN reported that intravenous medication administration was delayed due to equipment problems, specifically the need for more channels for A/ARIS pumps.
- RNs reported that when a telemetry technician was injured at work there was no replacement. The supervisor took over observing the monitors for a time, but then left, leaving the ICU RNs to do it.

Unsafe Telemetry Monitoring Affecting Both CHS Hospitals’ Hospital Critical Care, Medical-Surgical and Emergency Care Departments

At both CHS hospitals, the monitors displaying cardiac rhythms for all patients requiring telemetry monitoring from both the Critical Care (ICU) and Medical-Surgical (Med/Surg) departments are located in the ICU. The ICU is physically separate from the Med/Surg unit, and the system of communication between the monitor station and the Med/Surg unit is imperfect, resulting in delays in response to emergencies in the Med/Surg unit. Additionally, ICU RNs assigned to telemetry monitoring report monitoring unsafe numbers of telemetry meters at once, disruptions in telemetry monitoring, missed meals and breaks, and disruptions in the care of ICU patients. There is also a potential for a spill-over affect in the ER, as hospital policy requires the RN on monitor duty to call a code blue and request aid from the ER, every time the monitors go flat – usually a false alarm due to removal of leads. All of these problems could be avoided with telemetry monitors physically located in each unit where patients are under telemetry monitoring.

“Adequate numbers of trained medical personnel (physicians or nurses. or both) must be immediately available to treat important, life-threatening arrhythmias detected by the system” - **American College of Cardiologists Position Statement on Cardiac Monitoring**

Delay of Response to Telemetry Events in Med/Surg Unit

The Fallbrook Hospital policy for ICU RNs reporting telemetry observations regarding Med/Surg patients – including life-threatening arrhythmias requiring immediate intervention - is for the ICU RN to call to the Med/Surg RN station. There are times when no one is at the Med/Surg RN station, leaving the ICU RN with the choice of abandoning the monitors to physically go to the Med/Surg unit or delaying care for the Med/Surg patient while waiting for the phone to be answered. Even when there is someone to pick

up at the Med/Surg RN station, that person is not always an RN competent to respond to the patient. In all cases, there is no way for the ICU RN to confirm that a competent RN actually responds to the patient at the bedside.

Potential Spill-Over Effect into ER

Hospital policy is for monitor observers, whether an RN or technician, to call a Code Blue or Rapid Response for a lethal arrhythmia. The monitor watcher can be responsible for the cardiac rhythms of up to 20 patients. It is not appropriate for a person who is not observing the patient to make the decision to call Code Blue. RNs are often discouraged from actually calling a code blue because what shows on monitor is often a problem with the leads. The monitor observer cannot know this from another unit. Failure to immediately respond to a change in cardiac rhythm is among the most common reasons for fines issued to California hospitals.

Disruption of Care and Rest Breaks in the ICU

Two or three RNs per shift are typically assigned to the ICU. When one of these RNs is assigned to telemetry monitoring, they are forced to choose between leaving the monitors or refusing to help other RNs with emergencies with critically ill patients or routine duties, such as moving patients, which require two RNs.

Example from an actual ADO Report:

- Two registered nurses reported verbally and in writing that although two RNs were provided to the ICU one was assigned to monitor telemetry monitors. This RN was responsible for watching the monitors of patients on other units and those in the ICU. This RN was required to constantly observe the cardiac rhythms so she/he could not leave to go to the bathroom or to eat a meal for the entire 12 hour night shift. This RN could not assist with patient care in the ICU at all. The other two patients in the ICU each met American Association of Critical Care Nurses criteria for 1:1 staffing. One patient experienced cardiac arrest and remained severely compromised requiring ventilatory and pharmacological support with continuous adjustments. The second patient exhibited life-threatening respiratory compromise requiring frequent treatments and continuous observation. During the shift that patient needed emergency intubation. During the life threatening medical emergencies the RN assigned to cardiac monitors had to leave the monitors unobserved while helping save the lives of the patients assigned to the only ICU RN. Neither nurse could take a break. The nursing supervisor, who had not performed an assessment of the patients, claimed that the two patients were appropriate for 1:2 staffing. The supervisor did not respond to a request to help and refused to accept the written ADO.

Overload of Telemetry Monitoring

The ADOs documented that the number of cardiac rhythms monitors was up to ten Med/Tele and seven ICU for a total responsibility for 17 patients' cardiac rhythm at one facility. In RN's professional judgment 10 monitors is the maximum a single RN can safely monitor at a time (see inset).

Management Failure to Take Telemetry-Specific RN Competency into Account

In addition to all of the systemic problems outlined above, one ADO reports a Medical-Surgical RN was assigned to ICU telemetry monitor duties without orientation, despite repeated protests.

RNs' Solution

The professional registered nurses who care for patients requiring continuous cardiac monitoring request a monitor at the nurses' station. The monitor observer can then see that the assigned RN or charge nurse goes into the room of the patient. The assigned RN on the Med/Tele unit should be able to see the cardiac rhythm without having to leave the unit. Even better than a monitor at the nurses' station would be a monitor at the bedside so the RN can assess the rhythm in real time while performing initial and ongoing patient assessments. CHS hospitals must plan for all employees to take legally mandated breaks without depriving patients of needed care.

CHS Management Response

The California Board of Registered Nursing has stated that Nursing administrators, supervisors, and managers have a crucial responsibility to assure appropriate and competent nursing care to patients. Nursing administrators, supervisors and managers may have their licenses subject to discipline if they do not ensure assignment of clinically competent RN staff. **CHS Hospital supervisors are forbidden by CHS management to accept ADOs. Failing to respect the professional judgment of direct care registered nurses is unwise and can lead to adverse effects on patient care.**

"It is also proposed that the person monitoring the telemetry screens monitor no more than ten at any time. The person monitoring the screens shall not have any other assignment. This is necessary because human surveillance is critical for prompt recognition and response to clinically significant cardiac rhythm disturbances detected by the monitoring equipment. The Department identified no professional recommendations upon which it could rely, while there is a broad range of unsupported opinion about the maximum number of monitors that could be safely observed by a technician. The Department determined that, with an appropriately trained individual watching no more than ten monitors, it will be possible for that person to distinguish problems with the equipment and leads from serious, and potentially life-threatening, arrhythmias, so that nursing and medical personnel can be promptly alerted. **Without adequate available personnel to respond to changes in cardiac functioning detected by the equipment, the value of using the equipment at all is questionable.**" - AB 394 DHS Initial Statement of Reasons.

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Appendix

A. Selected ADO Reports

| Unit | Primary Reason | Notes |
|------|----------------------------------|--|
| ER | Staffing | RN assigned 4 High acuity admit hold patients, 2 ICU, 2 MS Tele. Appropriate ratio for these patients is 1:2, not 1:4. |
| ER | Staffing | Triage RN responsible for triaging incoming patients was also responsible for treatments/assessments/IV pushes for 5 patients assigned to LVN, RN was only staff member competent in Mercy Air (2 transfers during shift) and Desert Ambulance (3 transfers during shift) transfer paperwork |
| ER | Staffing | 1:4 ratio should have been 1:2 due to high acuity multiple stab wound patient, patient fell due to RN understaffing |
| ER | Staffing | RNs required to do clerical duties, delaying care |
| ER | Staffing | Transporting patients from ER to ICU with only one RN - insufficient staffing to perform CPR if patient enters cardiac/respiratory arrest. |
| ER | Staffing / Insufficient training | Traveler RNs chronically used to fill staff RN positions not given sufficient training/orientation. Patient discharge without getting all medications |
| ICU | Insufficient support staff | No replacement telemetry tech called after tele tech was injured at work |
| ICU | Staffing | No sitter ordered for patient who had verbally stated desire to kill self, and verbally stated s/he had attempted to do so. |

| | | |
|-----|--------------------------|---|
| ICU | Staffing | 1 RN assigned to tele monitor which must be staffed at all times, 2 other RNs with patients made meal coverage impossible, 1 patient attempting to get out of bed, other High acuity |
| ICU | Staffing | 2 high acuity ("5+") patients, both intubated, assigned to 1 RN while the other RN was assigned to monitor tele monitors. Urgent patient care needs, including one of the patients coding and at least one emergency intubation, necessitated RN assigned to tele monitors to periodically leave monitors unwatched. Support staff, including unit clerk, forced to leave their usual duties to help. Charting delayed until 5AM. |
| ICU | Staffing | No sitter ordered for patient who had attempted suicide by taking pet's medication. RN assigned 1:2. |
| MS | Inappropriate Assignment | MS RN assigned to ICU tele monitor duties without orientation, despite repeated protest. |
| MS | Staffing | RN assigned 4 patients; 2 of 4 High acuity requiring disproportionate attention/time. One of the 2 High acuity patients required 30mins out of each hour for meds and BP monitoring, another a post Op patient requiring a blood transfusion. |

| | | |
|---------|--|--|
| MS | Staffing | No MD in L&D so House Supervisor called to delivery, further complicating no Charge RN or Clerk staffing issue in MS. 2 High acuity patients (fall risk and confusion/fall risk) + new patient admit. Telemetry patient monitors located in a physically separate unit, causing delays in response to events observed on monitors. |
| MS/Tele | Insufficient training | RNs not trained on Pyxis medication system, exposing patients to potential medication errors |
| MS/Tele | Staffing | 1:5 ratio should have been 1:3 per patient acuity. 3 Total Care (1 with aspiration and skin breakdown, 1 new admit, 2 contact isolation, 2 w/ accuchecks and sliding scale insulin coverage before meals 1 peds requiring frequent IV pain management. Report at beginning of shift received late, interrupted by charge RN. Patient care effect:1 - Potential aspiration due to charge RN performing direct care, charge and aide. 2 - late medication delivery 3 -Late assessment 4 - documentation and care plans delayed |
| OR | Insufficient rest between shifts / insufficient equipment to perform surgical operations efficiently | RN shift extended to 20 continuous hours due to surgeries booked at the same time both requiring the hospital's only available C-ARM. RN clocked out at 2am, entire crew had to return for next scheduled surgery at 7am, RN worked 10 hours. Overall RN worked 30 out of 35 hours. |

| | | |
|----------------|--|--|
| PACU | Insufficient rest between shifts / insufficient beds in appropriate department | OR recovery patient who should have been in ICU in PACU. RN worked 12 hours then remained on call for next two days. Call back would have resulted in insufficient rest between shifts. |
| Women's Center | Staffing | Post Partum RN assigned 5 couplets and 3 adult patients in a unit where the maximum ratio mandated by law is 1:4 couplets or 1:6 women only. Simultaneously Labor and Delivery RN was assigned 3 patients, one of whom was in Active Labor, when ratio should be 1:1 for Active Labor. |

B. AACN Criteria for 1:1 Nursing Care

Establishing Criteria for 1:1 Staffing Ratios
R. Colette Hartigan, RN, BSN, MBA, CCRN
Critical Care Nurse, Vol. 20, No. 2, April 2000

Stability Level I

- Patients with unstable cardiac rhythms that cause hemodynamic compromise and necessitate frequent assessments, pharmacological interventions, and/or mechanical termination of the rhythm and patients who require external cardiac pacing and/or placement of a transvenous pacemaker
- Patients who experience hypertensive or hypotensive crisis and require rapid stabilization of blood pressure
- Patients with symptomatic cardiac tamponade who require immediate intervention on the unit including drainage and stabilization
- Patients who experience inadequate myocardial perfusion who exhibit ongoing symptoms of chest discomfort resulting in decreased cardiac output and severe hemodynamic instability
- Patients who develop symptomatic bleeding and require immediate intervention
- Patients who experience cardiac arrest and remain severely compromised requiring ventilatory and pharmacological support with continuous adjustments

- Patients who exhibit symptoms of extreme dyspnea, acute anxiety, orthopnea, and diffuse pulmonary congestion who are highly complex and vulnerable in the acute phase of their illness
- Patients who require insertion of an intracranial pressure monitoring device (ventricular drain or Camino) and demand continuous intracranial pressure monitoring with frequent assessment and interventions
- Patients with an acute change in neurological status who require continuous nursing assessment and interventions
- Nonventilated patients exhibiting life-threatening airway compromise who require frequent treatments and continuous observation
- Patients in metabolic crisis with multisystem compromise who require continuous monitoring, assessment, and interventions
- Patients who must leave the critical care area for a procedure or test and require continuous nursing assessment and monitoring for the duration of the test

Highly Complex Level I

- Patients assigned to a research protocol who require initiation into the study that necessitates documentation every 15 minutes or more often
- Patients who require a diagnostic or therapeutic intervention in conjunction with conscious sedation and recovery
- Patients who are potential organ donors who require immediate, extensive preparation and/or management
- Patients who are severely compromised and require continuous arteriovenous hemofiltration
- Patients who require pressure control ventilation in the acute stage of acute respiratory distress or ventilated patients in the critical stage of acute lung injury with high-PEEP and high oxygen requirements

Vulnerability Level I

- Patients whose families require frequent interventions including complex teaching and help resolving ethical concerns; for example, families who require counseling because they are considering terminating life support measures and/or donating organs for transplantation
- Patients exhibiting emotional trauma who require intensive care, collaboration, and coordination with other support services, including but not limited to victims of sexual assault

Resiliency Level I

- Patients in the acute phase of their illness who exhibit signs of confusion, sensory overload, or psychosis and require continuous assessment and immediate pharmacological interventions
- Patients who require continuous intravenous sedation and/or neuromuscular blockade for control of anxiety in the acute phase of their illness and those who exhibit withdrawal symptoms as they are weaned from long-term sedation.

C. AWHONN Staffing Guidelines

D. Scientific Research Linking Safe RN Staffing to Patient Safety

Implications of the California Nurse Staffing Mandate for Other States Linda H. Aiken, Ph.D., et al., Health Services Research, August 2010

The researchers surveyed 22,336 RNs in California and two comparable states, Pennsylvania and New Jersey, with striking results, including: if they matched California ratios in medical and surgical units, New Jersey hospitals would have 13.9 percent fewer patient deaths and Pennsylvania 10.6 percent fewer deaths. "Because all hospitalized patients are likely to benefit from improved nurse staffing, not just general surgery patients, the potential number of lives that could be saved by improving nurse staffing in hospitals nationally is likely to be many thousands a year," according to Linda Aiken, the study's lead author. California RNs report having significantly more time to spend with patients, and their hospitals are far more likely to have enough RNs on staff to provide quality patient care. Fewer California RNs say their workload caused them to miss changes in patient conditions than New Jersey or Pennsylvania RNs. In California, where hospitals have better compliance with the staffing limits, RNs cite fewer complaints from patients and families and the nurses have more confidence that patients can manage their own care after discharge. California RNs are substantially more likely to stay in their jobs because of the staffing limits, and less likely to report burnout than nurses in New Jersey or Pennsylvania. Two years after implementation of the California staffing law—which mandates minimum staffing levels by hospital unit—"nurse workloads in California were significantly lower" than Pennsylvania and New Jersey. "Most California nurses, bedside nurses as well as managers, believe the ratio legislation achieved its goals of reducing nurse workloads, improving recruitment and retention of nurses, and having a favorable impact on quality of care," the authors write.

The Impact of Medical Errors on 90-Day Costs and Outcomes: An Examination of Surgical Patients William E. Encinosa and Fred J. Hellinger, Health Services Research, July 2008

A new study published in the journal Health Services Research found that the large difference in calculations for medical error expenses might mean that interventions to increase patient safety -- like adding more nursing staff -- could be more cost-effective than previously reported. The study found that insurers paid an additional \$28,218 (52 percent more) and an additional \$19,480 (48 percent more) for surgery patients who experienced acute respiratory failure or post-operative infections, respectively, compared with patients who did not experience either error. Preventing these and other preventable medical errors would reduce loss of life and could reduce healthcare costs by as much as 30 percent, the researchers said. "Many hospitals are struggling to survive financially," study co-author William Encinosa, senior economist at the Agency for Healthcare Research and Quality, said in a statement. "The point of our paper is that the cost savings from reducing medical errors are much larger than previously thought." Pointing to previous research that looked at the business case for improving RN staffing ratios, the researchers concluded: "It is quite possible that the post-discharge costs savings achieved by reducing adverse events might just be enough for the hospital to break-even on the investment in nursing."

Overcrowding and Understaffing in Modern Health-care Systems: Key Determinants in Methicillin-resistant Staphylococcus Aureus Transmission Archie Clements, et al, Lancet Infectious Disease, July 2008

- A new study published in the July issue of the journal Lancet Infectious Disease finds that understaffing of nurses is a key factor in the spread of methicillin-resistant Staphylococcus aureus (MRSA), the most dangerous type of hospital acquired infection. "Overcrowding and understaffing have had a negative effect on patient safety and quality of care, evidenced by the flourishing of health-care-acquired MRSA infections in many countries, despite efforts to control and prevent these infections from occurring. There is an urgent need for a requirement for developing resource allocation strategies that minimize MRSA transmission without compromising the quality and level of patient care," the researchers concluded. The authors note that common attempts to prevent or contain MRSA and other types of infections such as requirements for regular and repeated hand washing by nurses are compromised when nursing staff are overburdened with too many patients. They also note that hospitals now involve nurses in a "vicious cycle" where a call for nurses to increase their infection control procedures "are seldom accompanied by increases in staffing levels and thus represent an additional work burden on nursing staff" that leads to a greater spread of infections.

Nurse Satisfaction and the Implementation of Minimum Nurse Staffing Regulations Joanne Spetz, Ph.D, Policy, Politics & Nursing Practice, April 3, 2008

- A statewide survey of nurses in California found that nurses perceived a significant improvement in their working conditions and were more satisfied with their jobs in the two years following implementation of the landmark California staffing law in 2004. According to the researchers, "Nurse satisfaction with many aspects of work increased significantly between 2004 and 2006. The largest changes in satisfaction, in percentage terms, were with adequacy of staff (a 12.95 % increase), providing patient education (+7.3%), clerical support (6.9%) and satisfaction with the job overall (5.9%)." The authors concluded: "A large body of research links job satisfaction, heavy workload , job stress, effective management and career development opportunities with turnover rates...It is possible that the improvements in RN satisfaction documented here will facilitate higher quality of care. High nurse turnover has a negative effect on the quality of care delivered to patients. If minimum staffing regulations improve nurse satisfaction, reduce job stress, and relieve workload, nurse turnover may indeed decline, further improving the quality of hospital care."

Survival From In-Hospital Cardiac Arrest During Nights and Weekends Mary Ann Peberdy, MD, et al., JAMA, February 20, 2008

- A national study on the rate of death from cardiac arrest in hospitals found that the risk of death from cardiac arrest in the hospital is nearly 20 percent higher on the night shift. The authors highlight understaffing during the night shift as a potential explanation for the death rate. "Most hospitals decrease their inpatient unit nurse-patient ratios at

night... Lower nurse-patient ratios have been associated with an increased risk of shock and cardiac arrest," the authors stated.

Nurse Staffing and Patient, Nurse and Financial Outcomes Lynn Unruh, PhD, RN, AJN, January 2008

- This report provides a comprehensive literature review of more than 21 studies published since 2002 that, according to the author, "underscore the importance of hospitals acknowledging the effect nurse staffing has on patient safety, staff satisfaction, and institutions' financial performance." According to the report, "the evidence clearly shows that adequate staffing and balanced workloads are central to achieving good patient, nurse, and financial outcomes. Efforts to improve care, recruit and retain nurses, and enhance financial performance must address nurse staffing and workload. Indeed, nurses' workloads should be a prime consideration. If a proposed change would improve care and also reduce excessive (or maintain acceptable) workloads, it should be implemented. If not, it shouldn't be."

The Impact of Nurse Staffing on Hospital Costs and Patient Length of Stay: A Systematic Review Petsunee Thungjaroenkul, RN, MS, Nursing Economics, Vol. 25, 2007

- This study provides a comprehensive review of the research on the impact of RN staffing ratios on hospital costs and patient length of stay (LOS). It identified 17 studies published between 1990 and 2006 and concluded: "the evidence reflected that significant reductions in cost and LOS may be possible with higher ratios of nursing personnel in hospital settings. Sufficient numbers of RNs may prevent patient adverse events that cause patients to stay longer than necessary. Patient costs were also reduced with greater RN staffing as RNs have higher knowledge and skill levels to provide more effective nursing care as well as reduce patient resource consumption. Hospital administrators are encouraged to use higher ratios of RNs to non-licensed personnel to achieve their objectives of quality patient outcomes and cost containment."

Newly Licensed RNs' Characteristics, Work Attitudes, and Intentions to Work Christine T. Kovner, PhD, RN,, et al, AJN, September, 2007

- A national study on the work experience and attitudes of newly licensed nurses in America found that the majority of new grads had been given full patient assignments immediately following their orientation, with poor supervision and management, while more than 45 percent reported having recently been given more than 6 patients to care for at one time -- a patient load that the researchers said placed their patients at an increased risk of injury or death. More than 55 percent reported that they had to work too fast; 33 percent reported having little time to get things done and nearly a third of new grads reported they had too many patients to get their job done well, Not surprisingly, as a result of these conditions, more than 37% of the new nurses say they plan to leave their current job in the next two years, and more than 41% say they, if free to do so, would take another job immediately. The authors conclude: "The proportion of newly

licensed RNs who expressed negative attitudes on individual survey items raises the concern that employers will not be able to retain them in the acute care settings where they start out."

**Staffing Level: a Determinant of Late-Onset Ventilator-Associated Pneumonia
Stephanie Hugonnet, et al, Critical Care, July 19, 2007**

- Understaffing of registered nurses in hospital intensive care units increases the risk of serious infections for patients; specifically pneumonia, a preventable and potential deadly complication that can add thousands of dollars to the cost of care for hospital patients. This type of pneumonia is a leading cause of as many as 2,000 patient deaths in Mass. hospitals, costing as much as \$400 million annually.

**Nurse Working Conditions and Patient Safety Outcomes Patricia W. Stone, Ph.D.,
et al., Medical Care, 45(6): 571-578, June. 2007**

- A review of outcomes data for more than 15,000 patients in 51 U.S. hospital ICUs showed that those with higher nurse staffing levels had a lower incidence of infections, such as central line associated bloodstream infections (CLSBI), a common cause of mortality in intensive care settings. The study found that patients cared for in hospitals with higher staffing levels were 68 percent less likely to acquire an infection. Other measures such as ventilator-associated pneumonia and skin ulcers were also reduced in units with high staffing levels. Patients were also less likely to die within 30 days in these higher-staffed units. Increasing RN staffing could reduce costs and improve patient care by reducing unnecessary deaths and reducing days in the hospital.

**Hospital Workload and Adverse Events Joel S. Weisman, Ph.D., et al, Medical
Care, 45(5): 448-454, May. 2007**

- A study conducted by researchers at Brigham & Women's Hospital and Massachusetts General Hospital found that overcrowded and understaffed hospitals that are pushing too hard to streamline and cut costs are putting their patients at risk for medication errors, nerve injuries, infections and other preventable mistakes, A 10% increase in the number of patients assigned to a nurse leads to a 28% increase in adverse events such as infections, medication errors, and other injuries.

**Nurse Staffing and Quality of Patient Care Robert L. Kane, MD., et al, Evidence
Report/Technology Assessment for Agency for Healthcare Research and Quality,
AHRQ Publication No. 07-E005, May. 2007**

- A comprehensive analysis of all the scientific evidence linking RN staffing to patient care outcomes found consistent evidence that an increase in RN-to-patient ratios was associated with a reduction in hospital-related mortality, failure to rescue, and other nurse sensitive outcomes, as well as reduced length of stay. Every additional patient assigned to an RN is associated with a 7% increase in the risk of hospital-acquired

pneumonia, a 53% increase in respiratory failure, and a 17% increase in medical complications.

**Quality of Care for the Treatment of Acute Medical Conditions in U.S. Hospitals
Bruce E. Landon, MD, MBA., et al, Archives of Internal Medicine, 166: 2511-2517,
Dec 11/25. 2006**

- A national study of the quality of care for patients hospitalized for heart attacks, congestive heart failure and pneumonia found that patients are more likely to receive high quality care in hospitals with higher registered nurse staffing ratios.

**Impact of Hospital Nursing Care on 30-day Mortality for Acute Medical Patients
Ann E. Tourangeau, Ph.D., et al., Blackwell Publishing: 32-44, Aug. 2006**

- A study of 46,000 patients in 76 hospitals found the adequacy of nursing staffing and proportion of registered nurses is inversely related to the death rate of acute medical patients within 30 days of hospital admission. The study's authors recommend that "if hospitals have goals of minimizing unnecessary patient death for their acute medical patient population, they should maximize the proportion of Registered Nurses in providing direct care."

**HeathGrades Quality Study: Third Annual Patient Safety in American Hospital
Study HealthGrades, Inc: April 2006**

- 80,000 Medicare patients each year died between 2002 - 2004 in our nation's hospitals from preventable medical errors, with 63% of those deaths attributable to failure to rescue by a registered nurse or physician.

**Nurse Staffing in Hospitals: Is There a Business Case For Quality? Jack
Needleman, Ph.D., Peter Buerhaus, Ph.D., R.N., et al., Health Affairs, 25(1): 204-
211, Jan.-Feb. 2006**

- Increasing the proportion of RNs without increasing total nursing hours per day could reduce costs and improve patient care by reducing unnecessary deaths and reducing days in the hospital.

**Longitudinal Analysis of Nurse Staffing and Patient Outcomes - More About
Failure to Rescue Jean Seago, Ph.D., et al., JONA, 36(1): 13-21, Jan. 2006**

- Increasing RN staffing increased patient satisfaction with pain management and physical care; while "having more non-RN" care "is related to decreased ability to rescue patients from medication errors."

**Correlation Between Annual Volume of Cystectomy, Professional Staffing, and
Outcomes - A Statewide, Population-Based Study Linda Elting, Ph.D., et al.,
Cancer, 104(5): 975-984, Sept. 2005**

- Patients undergoing common types of cancer surgery are safer in hospitals with higher RN-to-patient ratios. High RN-to-patient ratios were found to reduce the mortality rate by greater than 50% & smaller community hospitals that implement high RN ratios can provide a level of safety and quality of care for cancer patients on a par with much larger urban medical centers that specialize in performing similar types of surgery.

**Improving Nurse-to-Patient Staffing Ratios as a Cost-Effective Safety Intervention
Michael Rothberg, et. al, Medical Care, 43(8): 785-791, Aug. 2005**

- Improving RN-to-patient ratios could save thousands of lives each year and is more cost effective than clot-busting medications for heart attacks and strokes, and cancer screenings.

Hospital Speedups and the Fiction of the Nursing Shortage Gordon Lafer, Labor Studies Journal, 30(1): 27-45, Spring 2005

- "There is no shortage of nurses in the United States. The number of licensed registered nurses in the country who are choosing not to work in the hospital industry due to stagnant wages and deteriorating working conditions is larger than the entire size of the imagined 'shortage.' Thus, there is no shortage of qualified personnel there is simply a shortage of nurses willing to work under the current conditions created by hospital managers."

Nurses' Working Conditions: Implications for Infectious Disease Patricia W. Stone, et al., Emerging Infectious Disease, 10(11): 1984-1989, Nov. 2004

- Improving nurse staffing and working conditions "are likely to improve the quality of health care by decreasing incidence of many infectious diseases, and assisting in retaining qualified nurses."

The Working Hours of Hospital Staff Nurses and Patient Safety Ann E. Rogers, et al., Health Affairs, 23(4): 202-212, July/Aug. 2004

- Nurses working mandatory overtime are three times more likely to make a medical error. "Overtime, especially that associated with 12-hour shifts, should be eliminated."

Association Between Evening Admissions and Higher Mortality Rates in the Pediatric Intensive Care Unit Yeseli Arias, M.D., et. al, Pediatrics, 113(6): e530-e534, June 2004

- Children admitted to pediatric intensive care units at night are more likely to die in the first 48 hours of care; authors point to fatigue and lighter nurse staffing levels as contributing factors.

Consumer Perspectives: The Effect of Current Nurse Staffing Levels on Patient Care National Consumers League Report, May 2004

- National survey of recent patients in hospitals found that 45% believed their safety was compromised by understaffing of nurses; 12% believe their safety was extremely compromised. 78% of respondents support safe staffing legislation.

Nurse Staffing Levels and Quality of Care in Hospitals Mark W. Stanton, M.A., AHRQ Research in Action, 14; March 2004

- Poor hospital registered nurse staffing is associated with higher rates of urinary tract infections, post-operative infections, pneumonia, pressure ulcers and increased lengths of stay, while better nurse staffing is linked to improved patient outcomes.

Nurse Burnout and Patient Satisfaction Doris C. Vahey, Ph.D., et al., Medical Care, 42(2): II-57-II-66, Feb. 2004

- Improvements in nurse staffing in hospitals "simultaneously reduces nurses' high burnout and risk of turnover and increases patients' satisfaction with their care."

Is More Better? The Relationship Between Nurse Staffing and the Quality of Nursing Care in Hospitals Julie Sochalski, Medical Care, 42(2): II-67-II-73, Feb 2004

- Survey of 8,000 RNs in Pennsylvania hospitals found workload and understaffing contributed to medical errors and patient falls and to a number of important nursing tasks left undone at the end of every shift.

Nurse Staffing and Mortality for Medicare Patients with Acute Myocardial Infarction Sharina D. Peterson, Ph.D., et al., Medical Care, 42(1): 4-12, Jan. 2004

- "Medicare patients with AMI (heart attack) who were treated in higher RN staffing environments had a significant in-hospital mortality advantage." Conversely, patients are more likely to die in hospitals with high LPN staffing environments. "The mortality difference we observed are related to differences in hospital staffing patterns and may derive from substitution of personnel with less training or experience."

The Shocking Cost of Turnover in Health Care J. Deane Waldman, M.D., M.B.A., et al., Health Care Management Review, 29(1): 2-7, Jan. - March 2004

- The cost for advertising, training and loss in productivity associated with recruiting new nurses to a facility is \$37,000 per nurse at minimum and can add as much as 5% to a hospital's annual budget. Improving nurses' staffing conditions is a primary strategy for hospitals that can generate significant cost savings.

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Keeping Patients Safe: Transforming the Work Environment of Nurses (Executive Summary) Institute of Medicine, National Academy of Sciences, Nov. 2003

- Following up on the 1999 report on patient safety, *To Err is Human*, the Institute for Medicine calls for improved nurse-to-patient ratios, limits on mandatory overtime, and nurse involvement on every level to protect patients.

**Licensed Nurse Staffing and Adverse Events in Hospitals Lynn Unruh, Ph.D.,
Medical Care, 41(1): 142-152, 2003**

- Hospitals with better licensed nurse staffing had a significantly lower incidence of adverse patient events, including bed sores, patient falls and pneumonia.

**Nurse Staffing, Quality, and Hospital Financial Performance Barbara Mark, Ph.D.,
et al., Journal of Health Care Finance, 29(4): 54-76, Summer 2003**

- Increased staffing of registered nurses does not significantly decrease a hospital's profit margin, even though it boosts the hospital's operating costs.

**The Effects of Nurse Staffing on Adverse Events, Morbidity, Mortality, and Medical
Costs Sung Hyun Cho, Ph.D., et al., Nursing Research, 52(2): 71-79, March/April
2003**

- Increasing nurse staffing by just one hour per patient day resulted in a 10% reduction in the incidence of hospital-acquired pneumonia. The cost of treating hospital acquired pneumonia is \$28,000 per patient.

**Patient-to-Nurse Staffing Ratios: Perspectives from Hospital Nurses Peter D. Hart
Research Corp., A Research Study for AFT Health Care, April 2003**

- Three in five nurses say they are responsible for too many patients and the problem is harming care. 82% of nurses support legislation setting limits on nurses' patient assignments.

**Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job
Dissatisfaction Linda Aiken Ph.D., R.N., Journal of the American Medical
Association, October 22, 2002**

- For each additional patient over four assigned to an RN, the risk of death increases by 7% for all patients. Patients in hospitals with a 1:8 nurse-to-patient ratio have a 31% greater risk of dying than patients in hospitals with 1:4 nurse-to-patient ratios. Legislation to regulate RN-to-patient ratios is a credible means of protecting patients and to ending the nursing shortage.

**Strengthening Hospital Nursing Jack Needleman, Ph.D., et al., Health Affairs,
21(5): 123-132, Sept./Oct. 2002**

- "The implications of doing nothing to improve nurse staffing levels in many low-staffed hospitals are that a large number of patients will suffer avoidable adverse outcomes and hospitals and patients will continue to incur higher costs than are necessary."

Nurse Staffing and Healthcare-associated Infections Marguerite Jackson, Ph.D., R.N., et al., JONA, 32(6): 314-322, June 2002

- "There is compelling evidence of a relationship between nurse staffing and adverse patient outcomes," including serious bloodstream infections in hospital patients.

Nurse-Staffing Levels and Quality of Care in Hospitals Jack Needleman, Ph.D., et al., The New England Journal of Medicine, 346(22): 1715-1722, May 30, 2002

- A higher proportion of RNs in the staff mix and a greater number of nursing hours per day are associated with better patient outcomes.

Health Policy Report - Nursing in the Crossfire Robert Stimson, M.D., New England Journal of Medicine, 346(22): 1757-1766, May 30, 2002

- Provides a review of the research underlying the current crisis in nursing with recommendations for policy, including legislation to regulate RN ratios and to recruit nurses into the profession.

Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis Joint Commission on Accreditation of Healthcare Organizations (JCAHO), 2002

- JCAHO found that low staffing levels were a contributing factor in 24% of patient safety errors resulting in injuries or death since 1996. Recommends transforming the nursing workplace and giving hospitals an incentive to invest in high quality nursing care.

Intensive Care Unit Nurse Staffing and the Risk of Complications After Abdominal Aortic Surgery Peter J. Pronovost, M.D., Ph.D., et al., Effective Clinical Practice, 4(25): 199-206, Sept./Oct. 2001

- Patients treated in hospitals with fewer ICU nurses were more likely to have medical complications, respiratory failure or need a breathing tube inserted. The study also found the ICUs with fewer RNs incurred a 14% increase in costs.

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Nurses' Reports on Hospital Care in Five Countries Linda H. Aiken, Ph.D., R.N., et al., Health Affairs, 20(3): 43-53, May/June 2001

- Study finds widespread job dissatisfaction among hospital nurses in the US due to understaffing and poor working conditions. Half of US nurses report the quality of care at their hospital has deteriorated in the last year; one in five nurses overall and one in three nurses under 30 plan on leaving bedside nursing.

The Nursing Crisis in Massachusetts Report of the Legislative Special Commission on Nursing and Nursing Practice, May 2001

- "It is the unanimous consensus of licensed nurses, health care personnel and administrators that the shortage of nursing care in the Commonwealth is endangering the quality of care that our nurses can provide to the patient." The Commission's top two recommendations to solve the crisis include legislation to ban mandatory overtime and to set RN-to-patient ratios.

ICU Nurse-to-Patient Ratio is Associated with Complications and Resource Use After Esophagectomy Peter J. Pronovost, M.D., Ph.D., et al., *Intensive Care Medicine*, 26: 1857-1862, 2000

- A nurse caring for more than two ICU patients at night increases the risk of several post-operative pulmonary and infectious complications and was associated with increased resource use. The study advocates a ratio of one RN to no more than two patients.

Organization and Outcomes of Inpatient AIDS Care Linda H. Aiken, Ph.D., R.N., et al., LDI Issue Brief, 8(1): Sept. 1999

- Higher nurse-to-patient ratios are strongly associated with a lower mortality for patients with AIDS in hospitals.

Nurse Staffing and Patient Outcomes Mary A. Blegen, Ph.D., R.N., et al., Nursing Research, 47(1): 43-50, Jan./Feb.1998

- Inpatient units with a higher proportion of RN care had fewer adverse patient outcomes, including fewer medication errors, bedsores and patient complaints. Conversely, when more care was delivered by non-RN team members, rates of bedsores, complaints and patient deaths increased.

Downsizing the Hospital Nurse Workforce Linda H. Aiken, Ph.D., R.N., et al., Health Affairs, 15(4): 88-92, Winter 1996

- Hospitals cut nurse staffing levels in the 90s by 7.3% nationally, while all other categories of hospital personnel increased, including a 46% increase in non-nurse administrative personnel and 50% increase in other direct care staff. Massachusetts cut its RN staffing by 27%, highest in the nation.