2009

Improving Medication Safety by Implementing a Just Culture

Karen S. Lounsbury
University of San Francisco, klounsbu@valleycare.com

Improving Medication Safety by Implementing a Just Culture

Karen S. Lounsbury DNP (c), RN-BC, CNL

University of San Francisco

Doctorate of Nursing Practice Project

May 7, 2009

Table of Contents

Karen Lounsbury, RN, MSN
Manager of Staff Development
ValleyCare Health System
1015 East Stanley Blvd. Suite B
Livermore, CA 94550
e-mail klounsbu@valleycare.com
(925) 373-4141 office
(925) 580-0162 cell
(925) 373-4084 fax

Summary of Qualifications:

Staff Development Department from July 24, 2002 to present. Develops Staff Educational Needs Assessment and Education Plan for ValleyCare. BLS Instructor and ACLS Instructor. Instructs Hospital-wide Orientation and Nursing Orientation. Coordinates and instructs sessions of the VCHS New RN Residency Program. Provides instruction for monthly Mock Code Blue Drills. Monthly education intranet module preparation and review. Participates in recruitment activities with Human Resources. Coordinates Simulation Lab. Magnet Coordinator

Professional Experience:

2002-present	Staff Development Manager
2004-present	Adjunct Clinical Nursing Instructor, Chabot College
2001-2002	QI Coordinator
1995-2003	Relief Assistant Director of Nursing
1989-1995	CCU Staff RN Valley Memorial Hospital CCU and ValleyCare Medical Center CCU
1988-1989	CCU Staff RN, Tracy General Memorial Hospital, Tracy CA
1981-1983	CCU Staff RN, Dixie Medical Center, St. George, Utah
1980-1981	Medical/Surgical Floor Charge Nurse Dixie Medical Center, St. George, Utah
1977-1980	Medical Assistant Webster Orthopaedic Group, San Leandro and Oakland, CA

Additional Professional Activities:

2009	Clinical Nurse Leader Certification
2008-Present	Nursing Professional Development Certification
2004-Present	Chabot College Adjunct Instructor
2004-Present	Dysrhythmia Recognition and Telemetry Instructor
2002-Present	BLS Instructor
2002-Present	ACLS Instructor

Additional Professional Activities, cont:

2004-Present	Nurse Quality Council Chair
1996-2001	Thrombolytic Task force
1993-2000	Intra-Aortic balloon pump (IABP) training
1992-2000	Thrombolytic Research Projects: GUSTO I, GUSTO II, GUSTO IIB, GUSTO III, ASSENT II (Clinical Coordinator)
1991-Present	Critical Care Certification (CCRN-Alumnus)
1990-Present	Advanced Life Support (ACLS)

Educational Background:

2007-2009	Doctorate of Nursing Practice (Candidate) University of San Francisco, San Francisco, CA
2003-2006	Master of Science in Nursing: Nurse Educator California State University, Dominguez Hills, Carson, CA
1992-1993	Bachelor of Science in Nursing San Jose State University, San Jose, CA
1973-1979	Chabot College, Hayward, CA Graduate, Associate Degree in Nursing, June 1979
1977	MTD Business School, Medical Assistant Program
1973	Graduated from Granada High School, Livermore CA

Professional Memberships:

2008-Present	East Bay ACNL
2008-Present	American Nurses Association, ANA California
2003-Present	National Nursing Staff Development Organization
1993-Present	Sigma Theta Tau, Alpha Gamma Chapter
1989-Present	National and local memberships, American Association Critical Care Nurses, AACN, and Tri-Valley Chapter

Improving Medication Safety by Implementing a Just Culture

Doctoral Defense
University of San Francisco
Karen Lounsbury, RN-BC, CNL, DNP (c)
May 7, 2009

Many thanks to

- Advisor: Marjorie Barter, EdD, RN, CNL
- Committee: Drs. Kia James and Diane Torkelson
- Dean: Judith Karshmer, PhD, RN
- Chief Nurse Executive Jessica Jordan
- DNP classmates, esp. Connie Telles
- Husband Rich Lounsbury
- Jeanette Kitt editorial support
- Friends and Family

2

Outline

- Scope of the Project
- DNP Role in the Project
- Quality Indicators Core Measures
- Problem: Low Rate of Medication Error Reporting and Resolution
- Evidence from the literature
- Theoretical basis
- Intervention: Just Culture
- Evaluation
- Lessons Learned

3

ValleyCare Health System

Two hospital system
Livermore & Pleasanton
Community based
Not for profit

1962

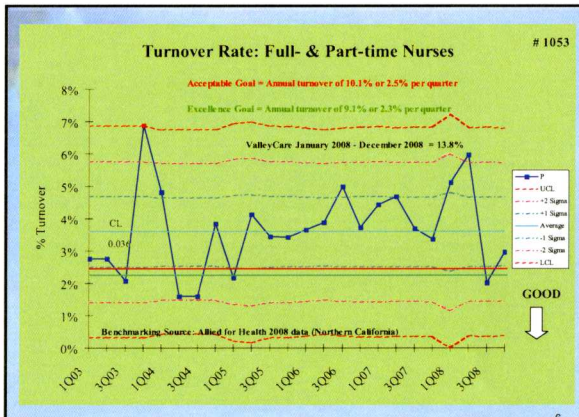
1992

4

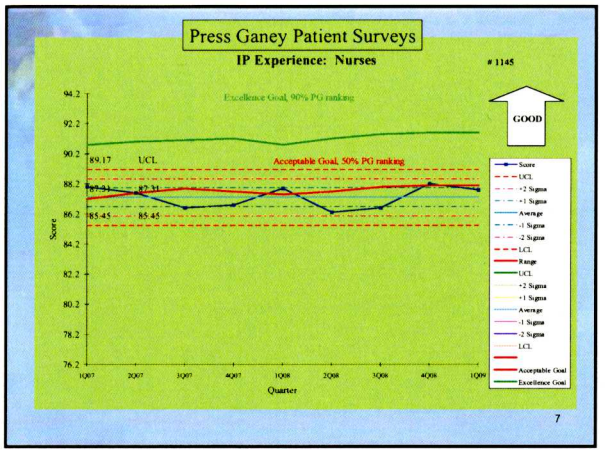
Nurses at ValleyCare

- 363 Registered Nurses
- 13 Licensed Vocational Nurses
- 44 Certified Nursing Assistants
- Turn over for 2008 was 13 percent
- Low vacancy rate in 2009: 0.33 percent
- Non-union environment
- Press Ganey employee satisfaction survey

5



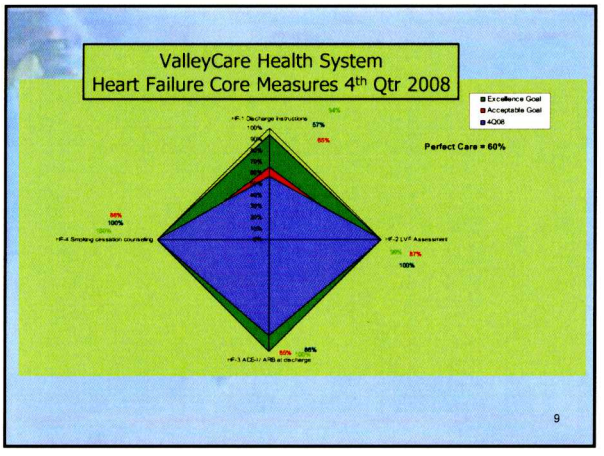
6

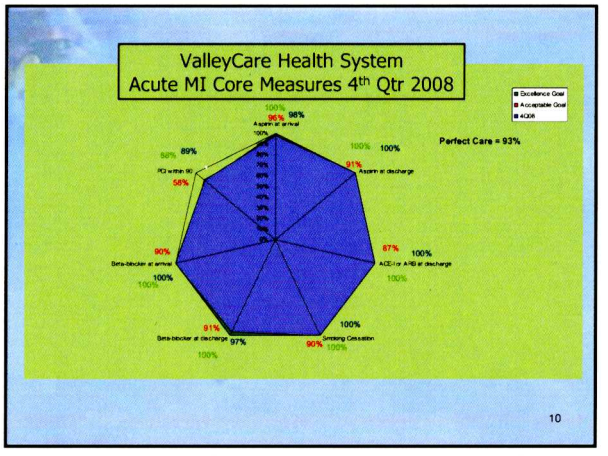


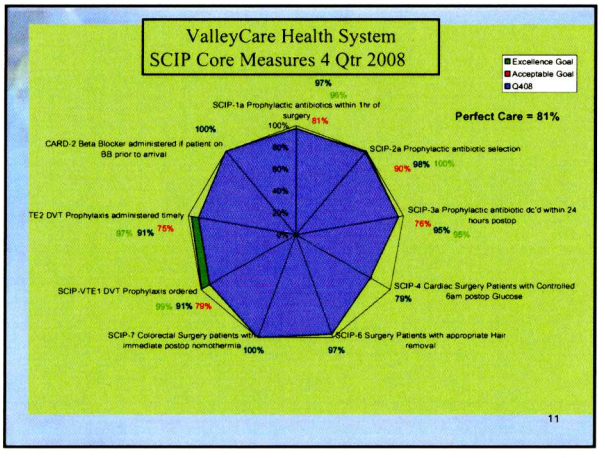
Doctorate in Nursing Practice at University of San Francisco

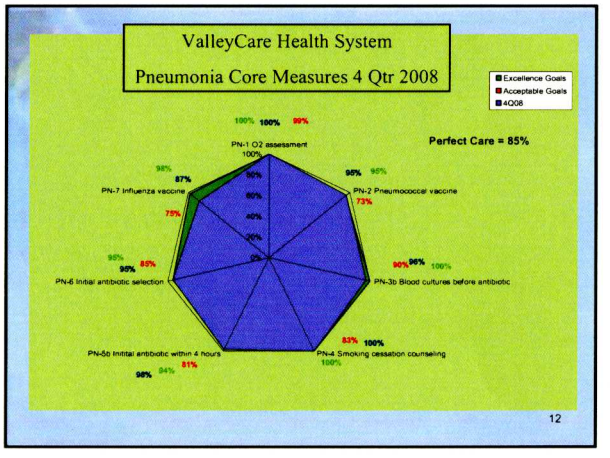
- Excellent Preparation for Magnet Coordinator
- Evidence Based Practice
- Grant Writing and Writing for Publication
- Statistics and Financial Management
- Advanced Roles
- Mentoring
- Networking

8







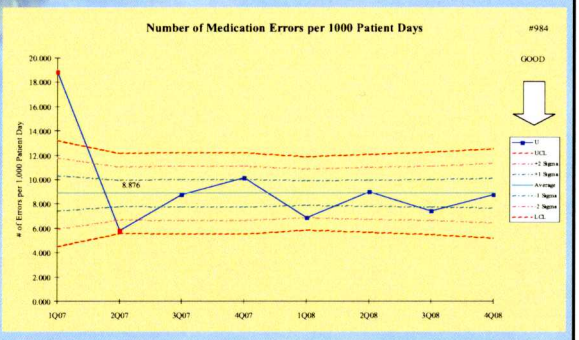


"Good" Outcomes: Not Good Enough

- Core Measures "Perfect Care" 60-93%
- Other reportable outcomes were rated "good" or better
  - Falls 2.2% (Excellence goal 2%)
  - Pressure Ulcer Prevalence 4% (Excellence 3%)
- Nursing Department goal is **excellence**
- Medication Error Reporting rates low
  - Data needed to improve

13

ValleyCare Health System 2007-2008



14

Anatomy of a Med Error

The Movie

15

Definition of a Medication Error:

"A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient or consumer…

(continued on next slide)

The National Council for Medication Error Reporting and Prevention

16

Definition cont.

…Such events may be related to professional practice, health care products, procedures and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring and use."

The National Council for Medication Error Reporting and Prevention

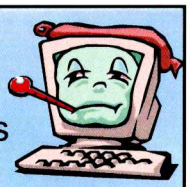
17

The Way We Were

- Paper forms in locked boxes
- Then Electronic Error Reporting
- In spite of a "non-punitive" error reporting
  - Fear of reprisal
- Low reporting rate stalled improvement
- Reports focused on errors not solutions
- Root Cause Analysis
  - Identifies process after a negative outcome

18

Current System: New Barriers to Reporting Med Errors



- Electronic error reporting system
  - Systems changed twice in 2008
  - Confidentiality (staff must identify themselves)
  - Staff comfort with computers
  - Time constraints (up to 45 minutes)
  - Fear of reprisal
  - Follow up not shared with staff

19

Evidence Based Practice

- Nurses' Environments associated with patient safety and quality of care (Institute of Medicine, 2004)
- Structural Empowerment of nurses correlates with patient safety (Agency for Healthcare Research and Quality, 2008)
- A safety-minded just culture:
  - workers have heightened awareness of their own behavior and risks to patient safety. (Institute for Safe Medication Practices, 2006)

20

Evidence, cont.

- American Association of Critical Care Nurses' *Silence Kills* (2005): encourage nurses to speak up about errors and reckless behavior
- Joint Commission (2004): adopt practices similar to Magnet facilities, i.e. nurse autonomy and control over practice to improve patient quality

21

Intervention

- Implementation of a **Culture of Safety**
  - Patient Safety Strategic Plan for 2009
  - Safety-Minded Just Culture
- Increase opportunities for staff to report medication system problems in safe environments
  - Staff empowerment
  - Restructure Nurse Councils
  - Unit Based Councils
  - Staff meetings

22

Theoretical Basis

- Kanter
  - Empowerment
  - Access to information and resources
- Senge
  - Learning organization
  - Team learning and Dialogue
- Lewin
  - Change theory

23

The Magnet Journey To Nursing Excellence

At ValleyCare Health System

2006-2009

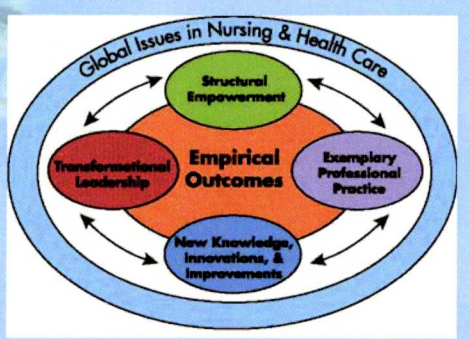
24

Magnet Hospitals

- Highest recognition for nursing excellence
- Positive environments for nurses
- Excellent patient outcomes
- Evidence based practice

25

Five Magnet Components Encircled by Global Issues in Nursing & Health Care



26

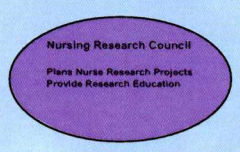
Implementation

- Staff education on the medication error reporting system
- Councils
  - Education for members, chairs
  - Include autonomy, shared decision making in councils
  - Time for dialogue about error prone systems
  - Clear responsibilities, reporting and feedback
  - Refer systems issues to appropriate department

27

ValleyCare Nurse Councils 2003-2008

Established 2003 with Performance Improvement Teams



Established 2007 following Unit-based Research Contests

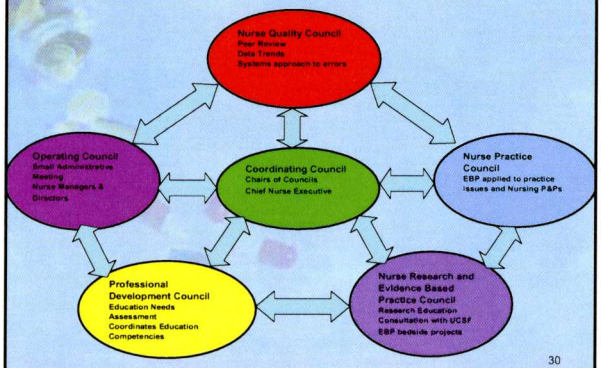
28

ValleyCare's Magnet Journey

09/2006	Chief Nurse Executive, Leaders attend Magnet conference; Begin Gap Analysis	10/2006
09/2007	Magnet Gap Analysis submitted; Magnet Grant awarded Betty Irene Moore Nurse Initiative	11/2007
11/2007	Research Council Kick Off dinner w/CNE; DNP student appointed Magnet Coordinator	12/2007
2/2008	Magnet Education Module developed by Coordinator; Presented to Nurse Quality, Nursing Administration; Posted on Intranet	07/2008
2/2008	Preceptor Agreement; BIMNI Grant Summit in San Francisco; Meeting w/Magnet Preceptor	2/19/2008
04/08/08	Press Ganey Survey presented at NAM; identif. communication, shared decision making	4/18/2008
04/2008	Transformational leadership shared gover. research presented at Councils, nsg meetings	5/01/2008
8/7/08	ANCC Magnet Consultant: Attended Nursing Administration & Nurse Quality Council Meetings; Magnet Consultant Report to CNE	8/08/2008
08/11/08	8/15/08 Joint Commission Survey; Submitted CHF grant proposal to BIMNI;	08/15/2008
10/2008	Coordinator to ANCC Magnet Conference in Salt Lake City; report to CNE share gov.	10/20/2008
10/23/08	Chair & Coord to Research Conference; UCSF Ctr for Nursing Research and Innovation	11/04/2008
12/7/08	Increased shared decision making at NAM; Practice Council; Magnet Consultant at VC	12/08/2008
2/5/09	Magnet update at NAM, NQC-NPC 2/12; 2/18 Research MOU w/ UCSF; Operating Council	2/26/2009
4/6/09	Magnet report at NAM CNE and Research Council to UCSF; Kickoff Coordinating Council	4/09/2009

29

Councils 2009



30

Research and EBP Council

31

Research Council at UCSF

32

Operations Council

33

Nurse Practice & Quality Council

34

Professional Development Council

35

Evaluation

- ↑ Number of medication errors from the computer reporting systems
- Record staff ideas for systems changes with resolution through Council minutes
- ↑ Medication error reports and trends outside the computer reporting system
- ↑ Press Ganey Employee Surveys 9/2009
- ↑ Patient satisfaction surveys

36

Lessons Learned

- Open Forum with nursing staff before change
  - Staff vision of shared decisions
  - Increase staff participation
- Education for all staff
  - Electronic error reporting system
  - Empowerment
  - Autonomy
  - Accountability
  - Team learning

37

Conclusion

- Building a Safety Minded Just Culture
- Magnet Journey
- Council restructuring
  - providing "safe environments"
- Doctorate of Nursing Practice=excellent preparation for a Magnet Coordinator

38

- Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.

  – **Margaret Mead**
  US anthropologist (1901 - 1978)

39

Improving Medication Safety by Implementing a Just Culture

DNP Comprehensive Exam

Karen S. Lounsbury DNP (c)

University of San Francisco

Section I: Introduction

Medication errors threaten patient safety and increase healthcare costs. The landmark study, *To Err is Human,* released by the Institute of Medicine (IOM) in 1999, reported that between 44,000 to 98,000 deaths occurred annually due to healthcare errors and the most frequently occurring hospital errors were medication errors (1). The Institute of Medicine (IOM) report in 2006, *Preventing Medication Errors,* concluded that 1.5 million preventable medication errors occur in the United States every year and each medication error or adverse drug event can add $8,750 to the cost of hospitalization (2). The Institute for Safe Medication Practices underscored the importance of moving beyond reporting errors to developing and validating proactive strategies to reduce errors (3).

A number of national initiatives by the Agency for Healthcare Research and Quality, the Institute of Medicine, and the Joint Commission, call for restructuring the nursing environment to improve patient safety. (2, 4, 5) Using these initiatives as a template to derive institutional goals for improvement of patient outcomes through better identification and resolution of system problems will assist hospitals to meet patient safety and quality goals. In addition, implementing a safety-minded just culture will provide an environment where nurses are empowered to report and resolve error-prone systems. The focus of this Doctorate of Nursing Practice project was to implement evidence based changes to the nursing department to decrease medication errors, improve patient safety and nursing satisfaction.

ValleyCare Health System is a 212 bed two-hospital system located in the greater San Francisco Bay area. The two-hospital system is a community based, not for profit, non-union environment employing 363 registered nurses, 13 licensed vocational nurses and 44 certified nurse assistants. Patient safety and quality care are the primary goals of the nursing department at ValleyCare Health System. ValleyCare nurses demonstrated readiness for change through the employee satisfaction surveys, through the strategic goals for nursing, and interest in achieving American Nurses Credentialing Center Magnet designation.

Readiness for Change

The administration and nurses of ValleyCare demonstrated readiness for change. In 2009 the ValleyCare Board of Directors approved an initiative by the Patient Safety Performance Improvement Team to develop a culture of safety. The 2007-2008 Strategic Plan for Nursing prioritized shared governance structures in the nursing department and redesign of the nursing councils to improve patient safety. In 2007, the nursing department began exploring American Nurses Credentialing Center's (ANCC) Magnet designation. Nurses responded in the 2008 Press Ganey survey that quality patient care was a high priority at ValleyCare but improvements were needed in communication and participation in decision-making (6).

Section I: Examining the Clinical Relevance of the Problem

Medication error reporting at ValleyCare falls below national rates. The definition of a medication error by the National Coordinating Council for Medication Error Reporting and Prevention is: "A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health

care professional, patient or consumer. Such events may be related to professional practice, health care products, procedures and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring and use." (7) Nurses provide the front line of defense in preventing patient care errors. (8) Leape and Balas, et al. credited nurses with preventing up to 85 percent of potential medication errors in their places at the forefront of patient care. (9, 10) Nurses report only five percent of the medication errors they discover; errors are underreported due to concerns about confidentiality, fears of reprisal, perceived lack of follow-up, and time constraints. (8, 9, 11, 12, 13) Thirty-nine percent of medication errors have been attributed to physicians, most errors by physician are identified and prevented by nurses or pharmacists; thirty-eight percent of medication errors attributed to nurses occur at the time of administration. (14) The Institute of Medicine (IOM) found errors are more frequently due to system problems than to individual inaccuracy. (1, 15) In 2002, the Joint Commission recommended changing the nursing environment to keep patients safe. (4) Nurses are more likely to report errors in safe, non-punitive environments. (16) Nurse councils can provide safe environments for nurses to identify and resolve error prone systems, particularly those surrounding medication errors.

Facility Strengths

Many patient outcomes at ValleyCare meet or exceed acceptable thresholds. Other strengths include a stable nursing workforce and positive patient satisfaction results. The nursing department is committed to improving patient outcomes from acceptable to excellent. Quality Data Trends are provided to committees, nurse managers and directors, at staff meetings and to the nurse councils. The data are also available on an intranet dashboard. Dashboards are effective

tools for communicating quality data; education may be necessary for staff to evaluate the results. (17) Quality Management and the Patient Safety Officer provide ongoing education to nurses who collect and interpret the data trends.

Nurse sensitive patient care outcomes at ValleyCare are compared to established national and state benchmarks such as the Centers for Medicare & Medicaid Services (CMS) core measures and the Joint Commission. The incidence of hospital acquired pressure ulcers, patient falls, and rates of device related infections at ValleyCare are examples of benchmarked outcomes (See Appendices A, B, C). The publicly reported core measures are heart failure, pneumonia, acute MI, and SCIP (See Appendices D, E). Nurse satisfaction and retention of experienced competent nurses positively influences patient outcomes and safety, therefore these indicators are important in tracking quality of care. (18)

In the 2008 RN annual turnover rate at ValleyCare was 13.8 percent, greater than the acceptable goal of 10.1 percent when compared to Northern California Hospital Alliance for Health 2008 data (See Appendix I) (19). In the February 2008 Press Ganey satisfaction survey employees ranked the facility's quality of care as high but identified the need for improvement in shared decision-making and communication, indicating a readiness for change in these areas. (6) Press Ganey patient satisfaction data collected every month from 1300 U.S. hospitals hovers at the acceptable benchmark. Using combined scores of a 5-point Likert scale, the score for satisfaction with nursing care was 86.3, compared to Press Ganey hospitals; ValleyCare ranked 51, just above the benchmark of 50 (See Appendix F).

Weakness: Inadequate Reporting of Medication Errors

The IOM report, *To Err is Human* estimated medication errors were both the most common and the most underreported healthcare errors. (1) ValleyCare generates an average number of 160 incident reports per month through the electronic reporting system. The staff reports some events through the electronic reporting system more frequently than medication errors: falls, equipment failures, visitor incidents, surgical incidents, conflict with physicians and other departments. The average numbers of medication errors reported by ValleyCare nurses and pharmacists is 16-24 errors per month. The Patient Safety Performance Improvement Team reported an error rate of 8.76 errors per 1,000 patient days for the fourth quarter of 2008. (See Appendix G) The national average for reported medication errors in hospital range from 2 to 8 per 1,000 doses; this rate is about ten times higher than ValleyCare reports. (20) The Institute of Safe Medication Practices adopted the position there is no acceptable incident rate for medication errors. (21) ValleyCare Health System concurred with the goal of zero medication errors. To realize this goal, medication errors and system flaws must first be identified and resolved.

ValleyCare uses a computerized medication error system; the system changed twice during 2008. Staff nurses and managers both report frustration with the electronic error reporting system. An inexperienced nurse can take up to 45 minutes to complete an electronic error report. A bar coded medication administration checking system (abbreviated MAK) was implemented at one of two ValleyCare facilities in February 2008. The bar code system provides real time medication error data and near misses when it is functioning correctly. Connectivity issues, nurses' overrides, software problems, and hardware failures interfered with consistent data reports. When the system worked correctly, the pharmacists and nurses were very satisfied;

during computer down time, the staff experienced frustration. Real time error reports generated through the bar coding system will eventually yield real time data for process improvement. A grant proposal was written for Phase II of the MAK Project in the second hospital site in the ValleyCare system.

Quality Management reports medication errors every month from the electronic reporting system. Medication errors were reviewed at a number of oversight groups: Patient Safety Performance Improvement Team, the Nurse-Pharmacy Committee, Pharmacy and Therapeutics Committee and the Nurse Quality Council. ValleyCare medication error reporting rates remained steadily at one tenth of the national estimates. Few problem-prone systems were identified or remedied. With few medication error reports, progress stalled in correcting the systems that let to the problems. A change in culture was needed.

Opportunities: A Safety-Minded Just Culture

A 2006 ISMP report recommended organizations and leaders prioritize three actions to improve quality and safety: 1) changing punitive environments, 2) ending incentives for unsafe behaviors and 3) changing systems once problems were identified (22). The Institute for Safe Medication Practices described a safety-minded just culture as one where workers have heightened awareness of their own behavior and risks to patient safety. (22) In a just culture, staff nurses are encouraged to disclose systems problems while retaining accountability for improving individual practice (23). Leaders in a just culture promote changes to systems that are error prone and coach workers to make better behavioral choices. Frontline nurses are in the best position to identify error prone systems; staff members do not speak up in environments perceived as punitive (24).

Nurse Councils and other shared governance structures can provide safe environments for reporting and exploring faulty systems rather than punishing individuals (12, 25).

A safety minded just culture has advantages over punitive and non-punitive cultures. Until the 1990's many healthcare organizations responded to errors with punitive measures, then in an effort to increase error reporting, non-punitive cultures replaced punitive ones. (22) In 2006, Hader recommended substituting the concept of non-punitive with just culture. In non-punitive environments, staff members were not disciplined for honest mistakes. If staff members are not held accountable for any mistakes, non-punitive cultures may perpetuate reckless behavior. (3, 26) In a just culture, incidents are reviewed and it is determined if the error resulted from a system process or negligent or reckless behavior. The ISMP identified reckless behavior as rare but blameworthy. (3) Reckless workers perceive the risk, understand the substantial risk, and make conscious decisions to disregard the risks. Healthcare workers engaging in reckless behavior should be counseled or disciplined according to an accountability model that is fair to all employees. When staff members know the organization will investigate systems that lead to errors and respond fairly to reckless behavior, there is more willingness to identify other problem-prone systems. (27)

Threats

Threats to developing shared decision-making structures and just cultures are similar to barriers to reporting errors. They include time constraints, resistance to change by nurses, fear of reprisal, cost and reliance on hierarchal decision-making. Pappas reported nursing costs comprise 50 percent of most hospital budgets. (28) Expenses related to shared decision making structures

includes education costs for members, release time and replacement costs for nurses to attend councils.

The nursing shortage is expected to worsen over the next ten years as the nursing workforce ages and retires. (29, 30, 31) The current nursing shortage focused attention on the importance of retaining competent nurses who decrease the incidence of errors and patient injuries. California already ranks 50th in the United States for numbers of RNs per population, therefore it is imperative that hospitals maintain experienced competent nurses. (32) The nurse turnover rate in some facilities is as high as 20 percent. (33) In 2008, Aiken found higher nurse satisfaction and retention related to three indicators: positive patient care environments, safe staffing levels and the nurses' level of education. (34) Positive care environments included quality of care in addition to managerial support and collegial relationships with physicians. Nurses with higher levels of empowerment also had higher levels of organizational commitment; higher commitment to an organization had positive effects on job performance and lowered the nurses' intent to leave. (35, 36)

Section II Review of the Evidence

The relationship between nurses' empowerment, autonomy, increased nurse satisfaction and patient safety is well documented. The Agency for Healthcare Research and Quality (AHRQ) Evidence Based Handbook includes evidence-based research on Magnet environments. (5) Research on Magnet facilities has been primarily cross-sectional surveys using convenience samples. Limitations to the studies include sampling bias of respondents and organizations. The scale used most frequently in research of Magnet characteristics is the Nursing Work Index-Revised (NWI-R). The NWI-R measures work values related to job satisfaction, productivity, and measures whether the environment reflects quality-nursing care. Most studies compared Magnet characteristics in Magnet to like non-Magnet facilities. Magnet hospital nurses reported high levels of autonomy in the clinical and organizational arenas and collegial relations with physicians. (37, 38) Two recent studies found correlations between structural empowerment and patient safety. (39, 40) Evidence of structural empowerment for Magnet designation includes demonstrating all nurses in the organization have the opportunity to participate in shared decision-making structures. (41)

The Nurse Reinvestment Act of 2002, Title II included provisions designed to increase nurse retention. This federal Act provided grants for nurses' shared decision-making structures, career ladders and educational scholarships. In 2004, the IOM study *Keeping patients safe: Transforming the work environment of nurses,* associated quality of care and patient safety to nursing environments (42). In 2002, the Joint Commission for the Accreditation of Healthcare Organizations recommended that hospitals adopt two key characteristics of Magnet Hospitals: respect for and empowerment of nurses. The 2004 Joint Commission report, *Healthcare at the*

Crossroads, recommended hospitals promote nurse autonomy and control over practice similar to traits found in Magnet facilities to improve patient quality. (4)

Improving communication is another recommended practice to reduce patient errors. The 2002 Joint Commission *Sentinel Event Alert,* Delays in Treatment, reported communication breakdown was responsible for 84% of healthcare sentinel events (43). In a comparison of healthcare and aviation safety, Gaba linked poor teamwork and communication problems to unfavorable outcomes. (44) The 2005 American Association of Critical Care Nurses study, *Silence Kills*, identified seven crucial concerns in healthcare. (45) The seven concerns were broken rules, micromanagement, mistakes, disrespect, incompetence, poor teamwork, and lack of support. These crucial concerns threatened patient safety yet were observed and tolerated for long periods of time. The study encouraged leaders to design environments where staff will speak up when they witnessed these concerns. Although speaking up and making decisions are associated with greater patient safety and job satisfaction, these behaviors may be unfamiliar to some nurses. A study of nurses by McCartan and Hargie in found that assertiveness did not preclude caring behavior. (46) Nurses unfamiliar with assertiveness need education and safe environments to increase their comfort with this skill.

Section III Implementation Plan

Theoretical Basis for Change

The expected result of the change is to increase identification and development of solutions for error prone systems through shared decision-making and a just culture. The theoretical basis for the change will be Kanter's empowering strategies, Senge's team learning concepts and Lewin's change theory. These compatible theories will guide and facilitate shared decision making in the community hospital system.

Kanter

Rosabeth Moss Kanter's empowering strategies have been used as the theoretical foundation for a number of studies changing nursing environments. (18, 46, 36, 37, 48) In 1993, *Men and Women of the Corporation,* Kanter wrote that participation does not have positive results without empowerment (49). Managers and leaders need to share information and authority for empowerment to occur at the staff level. The conditions necessary for effective work include employee access to information support and resources. (18) Education and strategies to increase empowerment should be provided to nurses unaccustomed to power or assertiveness. Empowerment will help staff have the confidence to share systems problems when they identify them. The IOM 2006 report *Preventing medication errors: Report brief* recommended improving patient safety by encouraging healthcare staff to identify and resolve system problems before errors reach patients. (2)

Senge

The 2004 IOM report, *Keeping patients safe: Transforming the work environment of nurses,* supported developing Senge's concept of "learning organizations" as a tenet of safe environments. (42) The IOM (2004) identified five practices that lead to safety in environments at high risk for error. The practices include (1) balance of production efficiency and reliability or safety, (2) promoting and maintaining trust in the organization, (3) active management of the change process, (4) worker involvement in decision-making related to work flow and work design, and (5) establishing the organization as a "learning organization."

Peter Senge (1990) defined learning organizations as "organizations where people continually expand their capacity the create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together." (50) Five disciplines identified by Senge as important to creating learning environments are systems thinking, personal mastery, mental models, building shared vision, and team learning. (51)

Senge's team learning concepts are useful when creating change in groups. Tenets of team learning are building a shared vision and developing new ideas together. The group, with a trained facilitator, sets the ground rules, avoids assigning blame and engages others in dialogue. Dialogue, according to Senge, involves participants engaging in generative listening, not imposing their views on the group, staying in the moment and suspending assumptions (52). Dialogue encourages members to say what they truly think and includes more listening than speaking. (52) Simpson wrote that psychologically safe places are often absent in healthcare

because they were lost in the pursuit of cost effectiveness and efficiency. (53) Nurse Councils should be designed as safe structures where all members are encouraged to listen to each other, speak up and solve problems creatively without fear of reprisal.

Lewin

Lewin's change model can help make a new process become part of the organization. In this case the change is implementing a just culture through the shared decision making structures. Kurt Lewin's force-field analysis and three steps of implementing change: unfreezing existing behavior, introducing the change of behavior and then freezing the new behavior. (54) The councils are in a transition; the inclusion of empowerment and team learning will be added as driving forces during this time of change. Restraining forces related to resistance to change will be diminished with additional information about the benefits of change. Lewin's theory of practicing the change will be used to freeze or solidify the process. As the councils continue to evolve, the stages of unfreezing, changing and freezing will continue. To accomplish the goal of a safety-focused just culture, the councils will incorporate concepts from Kanter's theory of empowerment, Senge's team learning concepts and Lewin's change theory.

The Intervention

To improve patient safety and quality, increase nurse empowerment and autonomy, ValleyCare is increasing opportunities for shared governance by restructuring the nurse councils. Shared governance was a model developed by social scientists to create a link between workers and work in professional environments. (55) During the 1970s, healthcare began to use shared governance as a model for professional nurses. Porter-O'Grady (2001) wrote that shared

governance provided the structure for organizing nursing work and was a key indicator of excellence. (56) In 2009, Bogue, Joseph, and Sieloff identified Nurse Practice Councils as the best way to develop shared governance. (47) Enhancing shared governance is consistent with the model of just culture and the Magnet journey. Increasing opportunities for staff involvement can provide safe environments to discuss error prone systems.

A University of San Francisco Doctorate of Nursing Practice (DNP) student was appointed to be the Magnet Coordinator and charged with guiding the journey to nursing excellence (See Appendix H, ValleyCare Health System's Magnet Journey) The DNP candidate served as the Nurse Quality Council chair and as a member of the Research Council. The DNP project included education for staff nurses about Just Culture and shared governance, expanding the councilor structure and structuring opportunities for the councils to identify systems deficiencies to reduce medication errors.

Support for Nurse Councils

The 2008 Magnet Model Components are exemplary professional practice, structural empowerment, new knowledge, innovation and improvements and empirical outcomes and transformational leadership. Magnet designation by the American Nurses Credentialing Center (ANCC) is the highest recognition conferred for outstanding patient quality and nursing professionalism. (41) Havens and Aiken described Magnet hospitals as positive environments with high quality patient care. (57) The support and participation of the CNE throughout the process of structural empowerment demonstrated administrative commitment to sharing information and governance (58) A Betty Irene Moore Nursing Initiative Grant for Magnet

Consultation was awarded to ValleyCare in 2007. (59) Using the recommendation of the ANCC Magnet Consultant, nurse councils were restructured to improve patient safety, quality and introduction of just cultures (See Appendices J-1 & J-2).

The literature supports shared governance as effective for improving nurse empowerment, communication and patient safety. The councils include concepts of autonomy, team learning, shared decision making and just culture. The Magnet Coordinator, as a member of all councils, scheduled time for staff members to discuss error reporting and systems change in the meetings. Because nurse councils should provide leadership opportunities to groom future nurse leaders, the council chairs were provided with education about transformational leadership and mentored in the acquisition of leadership skills (See Appendix K). (60). Lyndon recommended that staff should receive education to become effective council members, a module for new council members is under development. (61) The Magnet Coordinator advised councils to remain flexible and incorporate recommendations from members.

The Nurse Quality Council has a one-month turn around for peer review referrals to demonstrate efficiency. The Nurse Quality Council receives monthly medication error reports from the electronic reporting system and evaluates the systems that led to the errors. Staff members are given time to explore system problems beyond those discovered through the error reports. The councils are equitable; membership is open to all interested staff not by administrative appointment. A primary goal of nursing councils is to improve patient quality through developing a culture of safety. Improving collaborative practice is another goal of the shared

governance is to increase. The Council structure communication links were designed to promote collaboration among the disciplines, hospital Quality Councils and the Patient Safety PI team.

Section IV Evaluation

Evaluation of the intervention will be accomplished through a number of metrics. The rates of medication errors reported through the computerized system are expected to increase as the culture of safety is embraced. The systems that lead to errors will be discussed during the Nurse Quality, Nurse Practice and Nurse Research Councils (See Appendix L). The bar coded medication administration check system, MAK, will be implemented at the second hospital site in 2009 and yield more med error data, including near misses. Measuring nurses' workplace satisfaction is expected to demonstrate improvement with increased communication, autonomy and shared decision-making. The Press Ganey employee surveys will be conducted again in September 2009. (6) Patient satisfaction is collected by Press Ganey and reported on a monthly basis. The effects of increased nurse satisfaction are expected to correlate with better patient outcomes and patient satisfaction.

Impact on Patient Outcomes

Improved nursing care quality is cost effective. As mentioned earlier, the IOM reported that medication errors and adverse effects average $8,750. Pappas calculated the costs of nurse sensitive adverse events per case. (62) For medication errors an average cost was calculated at $334, falls cost $648, one UTI costs $1,005, one case of pneumonia costs $1,071, one pressure ulcer costs $2,384. In October 2008, the Centers for Medicare and Medicaid (CMS) no longer paid for eight "never events," those events determined to be hospital acquired.

Impact on the Health Care Environment

Providing time for nurses to actively engage in decision making is related to higher nurse satisfaction. The cost of release time to cover nurses to attend shared governance councils can be compared to the costs of nurse turnover. Pappas recommended identifying the work of nursing as a source of value instead of a cost center. (61) The cost factor of replacing a nurse to attend councils and complete projects related to shared governance can be calculated. Calculating the cost of council membership includes the hours of "non-productive" time and replacement costs. One method to calculate nursing costs is with Equivalent Patient Days (EPD) x $50/hr (average salary at ValleyCare) = $602 per EPD (61).

The turn over rate in 2008 for nurses at ValleyCare was 13 percent (See Appendix H). Cox reported some hospitals had turnover rates of 20 percent or higher. (33) The Voluntary Hospitals of America (VHA) estimated replacement costs for an RN at 100 percent of a nurse's annual salary. (63) The VHA estimated this cost as $46,000 for a med surg RN to $64,000 for an ICU RN. Calculated with the annual average salary for a nurse at ValleyCare, $50 multiplied by 2080, the annual salary or replacement cost is $104,000. The estimated cost to replace the 13 percent of nurses who left ValleyCare in 2008 was $4,907,760. It is expected the cost of release time to increase nurse satisfaction through better communication and increased shared decision making will be offset through decreased nurse turnover. Retaining a competent nurse workforce is cost effective and critical to maintaining a culture of safety (64, 65).

Continuous Quality Improvement Process

When nurses are empowered they are free to develop creative problem solving ideas. Control of nursing practice was identified as essential for a satisfying work environment. (66) The change to shared decision-making and a just culture is feasible, the shared decision making councils are increasing in number and authority. The councils are an active part of the hospital continuous quality improvement program. Evidence in the literature shows a relationship between shared governance structures and improved patient safety. (39, 40, 67)

Lessons learned

Although the shared governance process at ValleyCare is still evolving, lessons are already apparent. Quality Management identified low reporting rates of medication errors. Through the nurse council meetings, staff identified barriers to the reporting system. Computer hardware issues were reported to the Information Technology department. The reporting system changed twice during the last year. Renewed attention to the low rate of medication errors through the councils prompted the Quality Management Coordinator to provide additional education to nursing administration and at the Nursing Skills Days. Originally, a train-the-trainer program was used to educate staff about the error reporting system. The Quality Management department determined new training sessions in a computer lab were needed to improve error-reporting rates.

Prior to reorganizing the Councilor structures, an open forum with the nursing department would have been valuable. In a study of 196 nurses' involvement in shared decision-making, a dissonance was discovered between nurses' decisions and the decisions they wanted to make. (47) The forum would have identified the decisions important to ValleyCare nurses. Shared

governance proved more complicated than designing new flow charts and waiting for staff to flock to the newly formed councils. Plans are underway to send council members to observe other well-established councils at other healthcare facilities to improve council processes. Improving coordination and reporting structures between the Councils, PI teams, administrative groups and committees would have eliminated redundancies. Responding to these lessons learned, the Professional Development council has planned education on empowerment, just culture, autonomy, accountability and team learning. Senge recommended trained facilitators to implement team learning. (51)

Dissemination Plan

The dissemination plan includes publicizing the concepts of just culture, autonomy, empowerment and shared governance and how they improved medication safety and nursing quality at ValleyCare. The Maternal Child department showcased the shared governance councils and had sign ups at their Skills Days. This will be replicated at the subsequent Nursing Department Skills Days. Posters of the Nurse Councils will be displayed at the Nurses Day May 6th 2009. The activities of the Nurse Councils are chronicled in hospital Newsletters (See Attached PDF). The Nurse Councils plan a Poster session presentation at a National Nursing organization. Additional communication about the Council activities will be provided to senior administration through Board Reports. Members of the Nurse Councils also plan to publish their story in a scholarly journal.

Conclusion

ValleyCare Health System continues to grow and change as it serves the community. The facility maintains an emphasis on service and quality improvement. Medication errors put patients at risk. It was recognized that medication errors were underreported and systems needed to change to improve medication safety. Implementing shared governance and safety-minded just cultures are two documented methods to improve nursing satisfaction and patient outcomes. Nurse leaders can engage staff in process improvement and adopting a just culture model, where empowered staff identify and correct problem prone systems. Nurse Councils can be the safe environments where staff nurses engage in dialogue to solve significant health care issues. In an era of constant change in healthcare, the place of nurses is leading the quality charge not sitting passively on the sidelines.

References

1. Kohn L T, Corrigan J M, Donaldson MS. (Eds.). *To err is human: Building a safer health system. Institute of Medicine.* Washington, D.C.: National Academy Press; 1999.

2. Institute of Medicine. *Preventing medication errors: Report brief.* Washington, D.C.: National Academies Press. Published July 2006. http://www.nap.edu.

3. Institute for Safe Medication Practices. Our long journey towards a safety-minded just culture Part II: Where we are going. http://www.ismp.org/Newsletters/acutecare/articles/20060921.asp?ptr=y. Published September 21, 2006. Accessed March 29, 2009.

4. Joint Commission on Accreditation of Healthcare Organization. *Healthcare at the Crossroads.* Oakbrook Terrace, Ill: Joint Commission on Accreditation of Healthcare Organizations. http://www.jointcommisssion.org/NR/rdonlyres/5C138711-ED76-4D6F-909F-B06E0309F36D/0/health_care_at_the_crossroads.pdf Published August 2008. Accessed February 25, 2009.

5. Lundmark VA. Magnet Environments for Professional Nursing Practice in Patient Safety and Quality, In *An Evidence-Based Handbook for Nurses*. Hughes, R.G., Ed. Rockville, MD: Agency for Healthcare Research and Quality. 2008:1-22. Accessed February 20, 2009 from http://www.ahrq.gov/qual/nurseshdbk/docs/LundmarkV_MEPNP.pdf

6. Press Ganey (2008). http://www.pressganey.com Accessed July 20, 2008

7. National Coordinating Council for Medication Error Reporting and Prevention. What is a medication error? http://www.nccmerp.org/aboutMedErrors.html?USP_Print=true&frame=lowerfrm. Accessed March 24, 2008.

8. Mick, JM Wood GL, Massey JL. The good catch pilot program: Increasing potential error reporting. *J Nurs Adm.* 2007;37(11): 499-503.

9. Leape, LL, Bates, DW, Laird Cullen DJ, Cooper J, et al. Systems analysis of adverse drug events. *JAMA*; 274:35-43.

10. Balas MC, Scott LD, Rogers AE. The prevalence and nature of errors and near errors reported by hospital staff nurses. *Applied Nurs Res.* 2004;17(4): 224-230.

11. Osborne J, Blais K, Hayes JK. Nurses' perceptions: When is it a medication error? *J Nurs Adm.* 1999;29(4): 33-38.

12. Uribe C L, Schweikhart SB, Pathak DS, Marsh GB, Fraley RR. Perceived barriers to medical-error reporting: An exploratory investigation. *J of Healthcare Manage.* 2002;*47*(4): 263-279.

13. Jeffe, DB, Dunagan, WC, Garbutt, J. et. Al Using focus groups to understand physicians and nurses perspectives on error reporting in hospitals. *Jt Comm J Qual Saf.* 2004; 30: 471-479.

14. Wright AA, Katz IT. Bar coding for patient safety. *N Engl J Med.* 2005;353(4): 329-332.

15. VanOyen Force M, Deering L, Hubbe J, Anderson M, Hageman B, Cooper-Hahn M, Peters W. Effective strategies to increase reporting of medication errors in hospitals. *J Nurs Adm.* 2006;36(1):34-41.

16. Institute of Medicine. *Crossing the quality chasm: A new health system for the 21st century.* Washington, DC: National Academies Press. 2001

17. Brown DS, Aydin, CE, Donaldson N. Quartile dashboards: Translating large data sets into performance improvement priorities *J for Healthcare Qual.* 2008;30(6): 18-30.

18. Laschinger HKS, Finegan J, Shamian J. The impact of workplace empowerment, organizational trust on staff nurses; work satisfaction and organizational commitment. *Health Care Manage Rev.* 2001;25(3):7-23

19. Northern California Hospital Alliance for Health. California Hospital Association http://www.cha.org

20. Nicol, N., & Huminski, L. How we cut drug errors. *Modern Healthcare,* 2006;36(34), 38.

21. Institute for Safe Medication Practices. Frequently asked questions. http://www.ismp.org/faq Published 2008. Accessed March 22, 2009.

22. Institute for Safe Medication Practices. Our long journey towards a safety-minded just culture Part I: Where we've been. http://www.ismp.org/Newsletters/acutecare/articles/20060907.asp?ptr=y. Published September 7, 2006. Accessed March 29, 2009.

23. Apold J, Daniels T, Sonneborn M. Promoting collaboration and transparency in patient safety. *Jt Comm J Qual Patient Saf.* 2006;32:672-675.

24. Vogelsmeier A, Scott-Cawiezell J. A just culture: The role of nursing leadership. *J Nurs Care Qual.* 2007;22(3):210-212

25. Marx D, Comden SC, Sexhus Z. eds. Using the JC algorithm: a practice session. *Just Culture Community News and Views.* 2006;2(Jan/Feb):4-6

26. Hader R. A "Just Culture" proves just right. *Nurs Manage.* 2006; Accessed March 7, 2009 from www.nursingmanagement.com

27. Marx D, Comden SC, Sexhus Z. Our inaugural issue-in recognition of a growing community. *The Just Culture Community News and Views.* Nov/Dec 2005;1:1

28. Pappas SH. The cost of nurse-sensitive adverse events. *J of Nurs Adm.* 2008;38(5): 230-236.

29. U.S. Bureau of Labor Statistics. *Monthly Labor Review.* 2007 Nov. Retrieved from www.bls.gov/opub/mlr/2007/11/art5full.pdf February 19, 2009.

30. Buerhaus P. More nurses, better healthcare quality. *Ind Eng.* 2006;38(3):17-19.

31. Health Resources and Services Administration (HRSA) (2004). Projected supply, demand and shortage of RNs: 2000-2020. Retrieved March 1, 2009 from http://bhpr.hrsa.gov/healthworkforce/reports/behindrnprojections/5.htm

32. Fletcher, J. Guzley, R. Barnhill, J. & Philhour, D (2004). Survey of registered nurses in California 2004. Accessed March 1, 2009 from http://www.rn.ca.gov/forms/forms.

33. Cox KS, Teasley SL, Zeller RA, Lacey SR, Parsons L, Carroll C A, Ward-Smith P. Know staff's "intent to stay." *Nurs Manage.* 2006: 13-15. Retrieved February 26, 2009 from www.nursingmanagement.com

34. Aiken LH, Clarke SP, Sloane DM, Lake ET, Cheney T. Effects of hospital care environment on patient mortality and nurse outcomes. *J of Nurs Adm.* 2008;18(5): 223-229.

35. Nogueras D J. Occupational commitment, education and experience as a predictor of intent to leave the nursing profession. *Nurs Econ.* 2006;24(2): 86-92.

36. Erickson JI, Hamilton GA, Jones DI, Ditomassi M. The value of collaborative governance/Staff empowerment. *J Nurs Adm.* 2003;33(2):96-104.

37. Laschinger HKS, Almost J, Tuer-Hodes D. Workplace empowerment and magnet hospital characteristics: making the link. *J Nurs Adm.* 2003; Jul-Aug; 33(7/8): 410-422.

38. Brady-Schwartz, DC. Further evidence on the Magnet Recognition program: implications for nursing leaders. *J Nur Adm.* 2005;*35*(9), 397-403.

39. Armstrong KJ, & Laschinger H. Structural empowerment, Magnet hospital characteristics, and patient safety culture: making the link. *J of Nurs Care Qual.* 2006;*21*(2):124-132.

40. Laschinger, HK, Leiter, MP. The impact of nursing work environments on patient safety outcomes: the mediating role of burnout/engagement *J Nurs Adm.* 2006;May;36:259-67.

41. American Nurses Credentialing Center. *Application Manual: Magnet Recognition Program.* Silver Spring, MD: Author; 2008a

42. Institute of Medicine. *Keeping patients safe: Transforming the work environment of nurses.* Washington, DC: National Academies Press; 2004. http://www.nap.edu.

43. Joint Commission. Delays in treatment. *Sentinel Event Alert.* 2002; 26 Accessed from http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_26.htm?print=yes

44. Gaba DM, Singer SJ, Sinaiko AD, Bowen JD, Ciavarelli AP. Difference in safety climate between hospital personnel and naval aviators. *Hum Factors.* 2003; 45:173-185.

45. American Association of Critical-Care Nurses. *Silence Kills.* VitalSmarts. 2005. http://www.silencekills./PDL/SilenceKills.pdf. Accessed March 24, 2009.

46. McCartan PJ. Hargie OD. Assertiveness and caring: Are they compatible? *J Clin Nurs.* 2004;*13*: 707-713.

47. Bogue RJ, Joseph ML, Siloff CL. Shared governance as vertical alignment of nursing group power and nurse practice council effectiveness. *J Nurs Manage.* 2008;17:4-14

48. Mangold KL, Pearson KK, Schmitz JR, Specht JP. Perceptions and characteristics of registered nurses' involvement in decision-making. *Nurs Adm Q.* 2006;30(3):266-272.

49. Kanter RM. *Men and women of the corporation.* New York: Basic Books; 1993.

50. Senge P. *The fifth discipline.* 1990. Currency Double-Day.

51. Smith MK. Peter Senge and the learning organization. *The encyclopedia of informal education.* 2001. Accessed April 5, 2009 from http://www.infed.org/thinkers/senge.htm.

52. Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B., Smith, B. J. (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization.* New York: Doubleday.

53. Simpson RL. Creating a true learning organization. *Nurs Manage.* 1996;27(4):18-19.

54. Lewin K. Frontiers in group dynamics: Concept, method, and reality in social science, social equilibria, and social change, *Hum Relat.* June 1947;1: 5-41.

55. Caramanica L. Shared governance: Hartford Hospital's Experience. *Online J Issues Nurs.* http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OHIN/TableofContents/Volume92004/No1Jan04/HartfordHospitalsExperience.aspx. Published January 31, 2004. Accessed March 22, 2008

56. Porter-O'Grady, T. Is shared governance still relevant? *J of Nurs Adm.* 2001;31(10):468-473.

57. Havens D S, Aiken, LH. Shaping systems to promote desired outcomes: The Magnet hospital model. *J Nurs Adm.* 2004; 29(2): 14-20.

58. Gokenbach V. Professional nurse councils: A new model to create excitement and value and productivity. *J Nurs Adm.* 2007;37(10), 440-443.

59. Betty Irene Moore Nurse Initiative (BIMNI) Grantee Website. 2009 Accessed March 24, 2009 from http://www.moore.org/pa-grants-awarded.aspx?pa=32

60. Moore SC, Hutchison SA. Developing leaders at every level: Accountability and empowerment actualized through shared governance. *J Nurs Adm.* 2007;37(12): 564-568.

61. Lyndon A. Communication and teamwork in patient care: How much can we learn from aviation? *JOGN Nurs.* 2006; *35*(4):538-546.

62. Pappas, SH. Describing costs related to nursing. *J of Nurs Adm.* 2007;37(1): 32-40

63. Voluntary Hospitals of America. Clinical Improvement 2009. https://www.vha.com/portal/server.pt Accessed March 24, 2009

64. Beacon Collaborative Hospital Council of Northern and Central California. Beacon The Bay Area Patient Safety Collaborative. http://www.beaconcollaborative.org Published 2009 Accessed March 24, 2009.

65. Casida J. Linking nursing unit's culture to organizational effectiveness: A measurement tool. *Nurs Econ.* 2008;26(2):106-110.

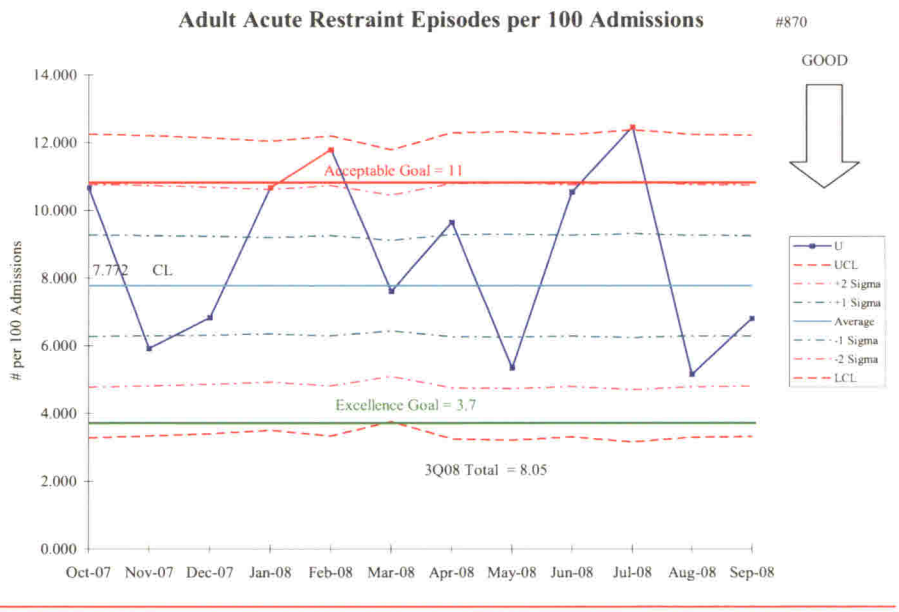
66. Kramer M, Schmalenberg CE, Maguire P, Burke R, et al. Structures and practices enabling staff nurses to control their practice. *West J Nurs Res.* 2008;30(5): 539-559.

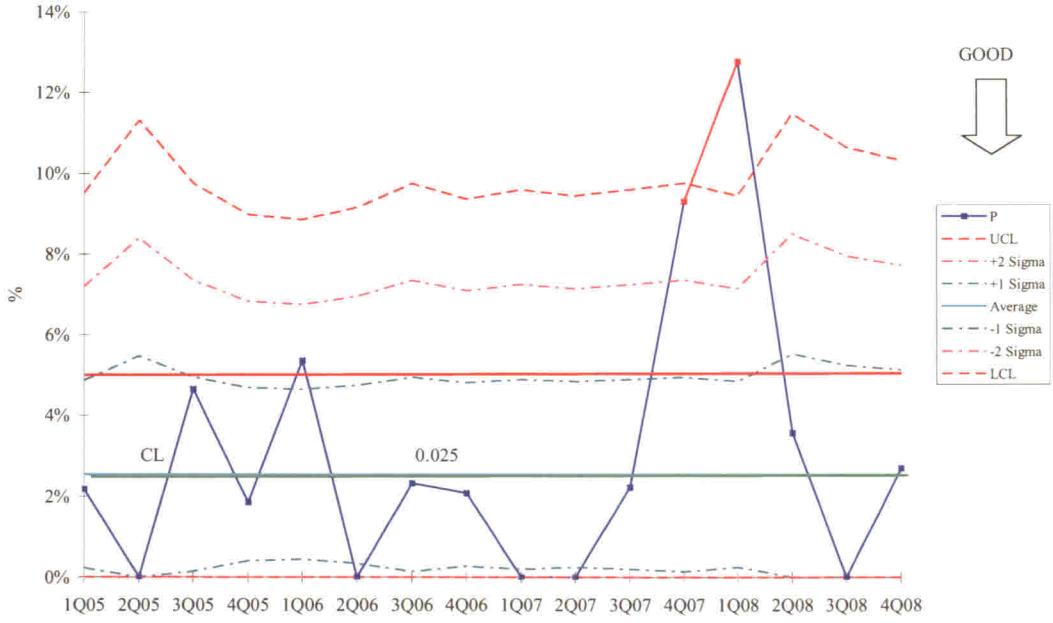
66. Swihart D. *Shared governance: A practice approach to reshaping professional nursing practice.* Marblehead, MA: HCPro;2006.

67. U. S. Department of Health & Human Services. Hospital Compare: A quality tool provided by Medicare. http://www.hospitalcompare.hhs.gov. Published Feb 11, 2009. Accessed March 24, 2009

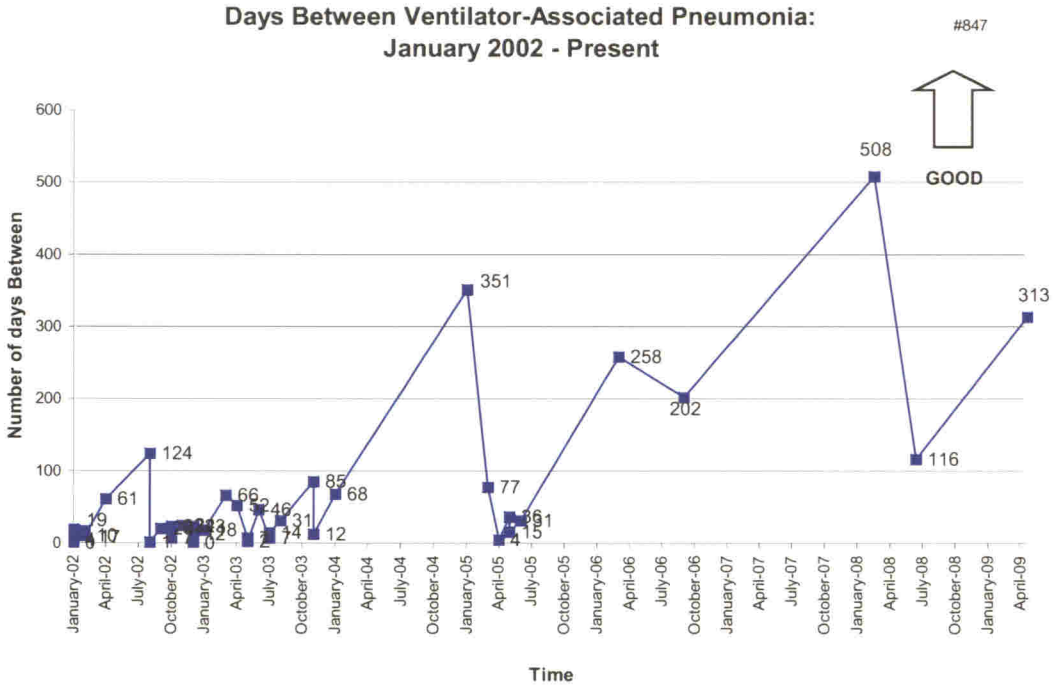
68. Institute for Healthcare Improvement (IHI). Homepage. http://www.ihi.org/ihi. Accessed March 23, 2009.

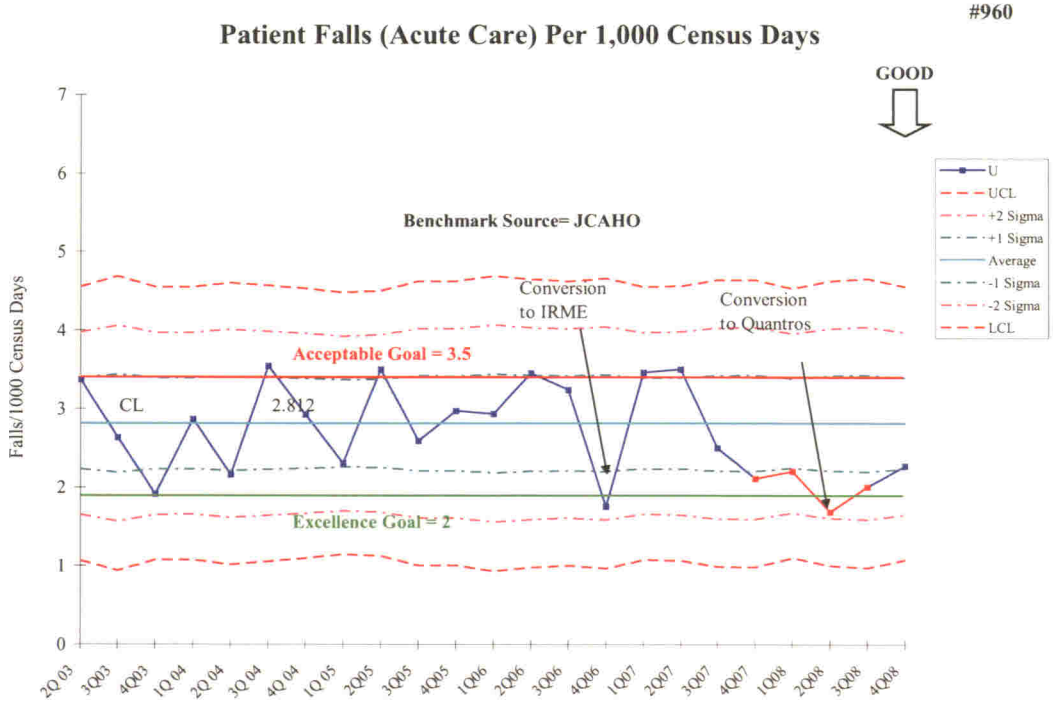
ValleyCare Health System Appendix A





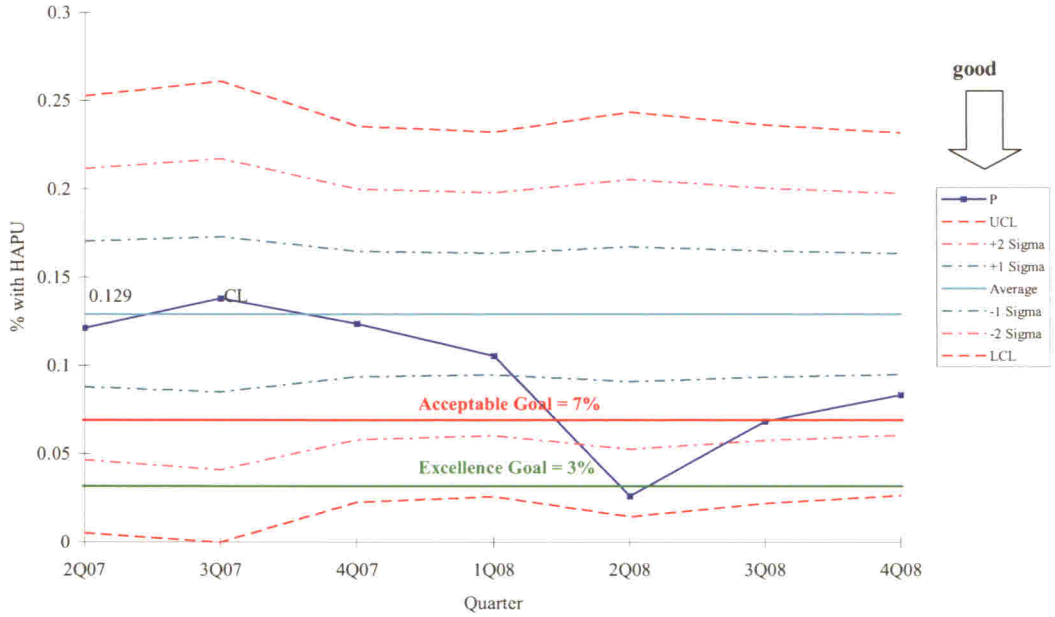
ValleyCare Health System Appendix B



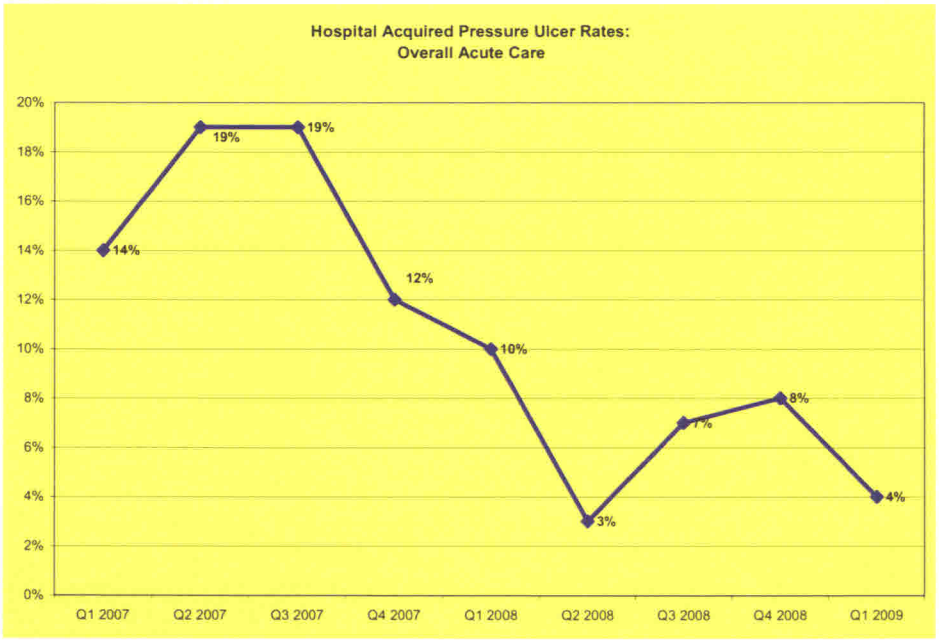


ValleyCare Health System Appendix C

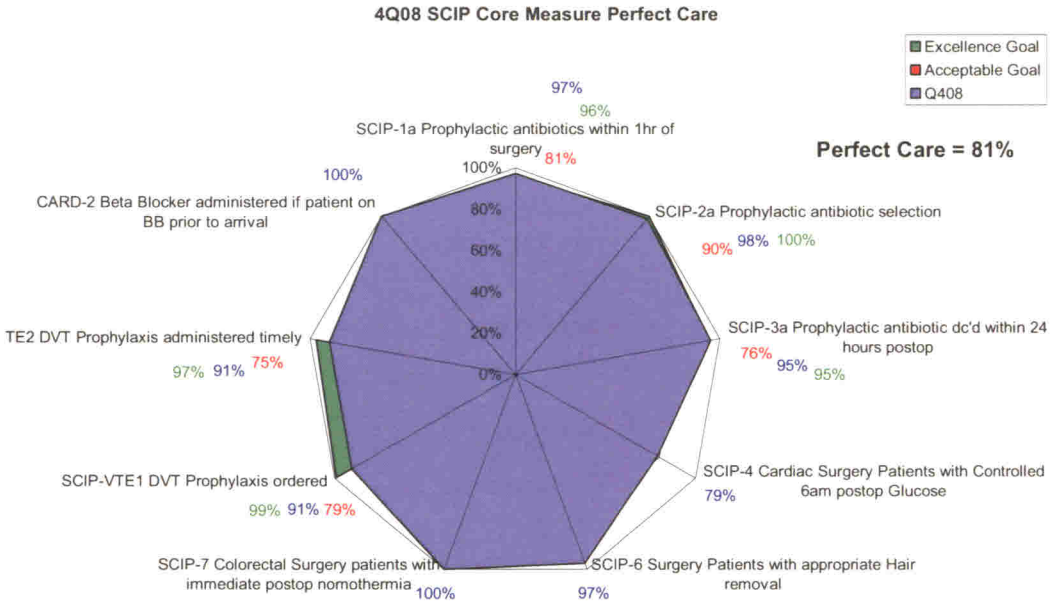
Hospital Acquired Pressure Ulcers (prevalence) **# 1121**

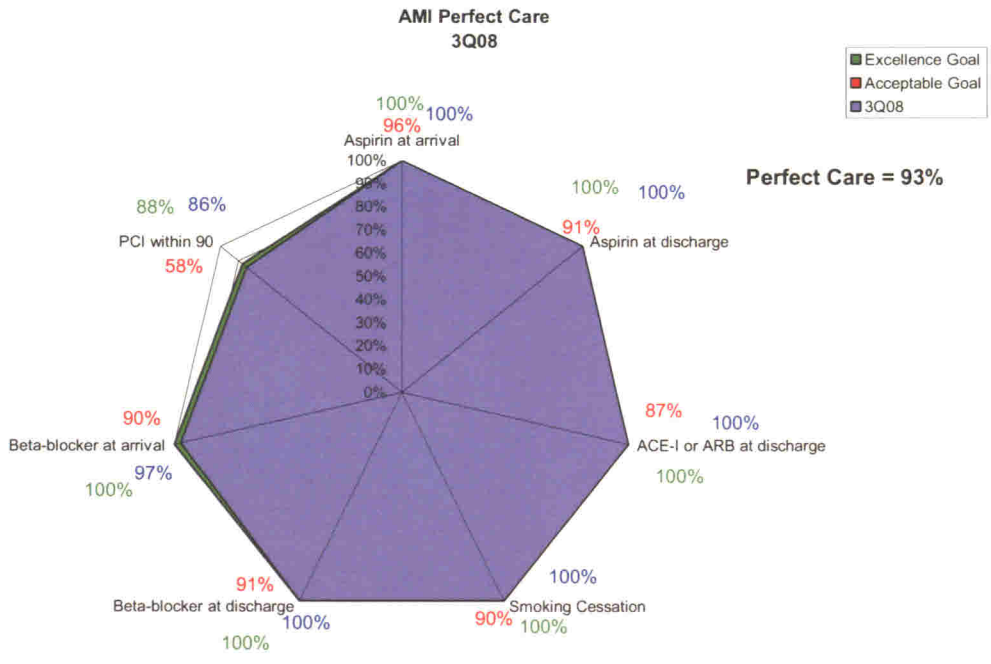


Most Recent Prevalence Data 3/09

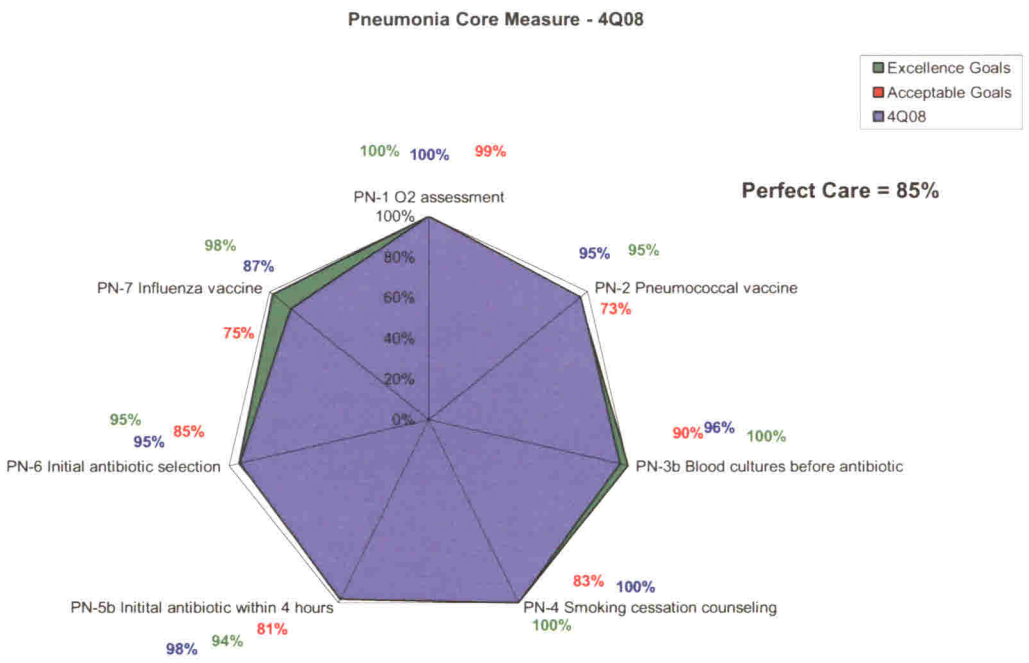


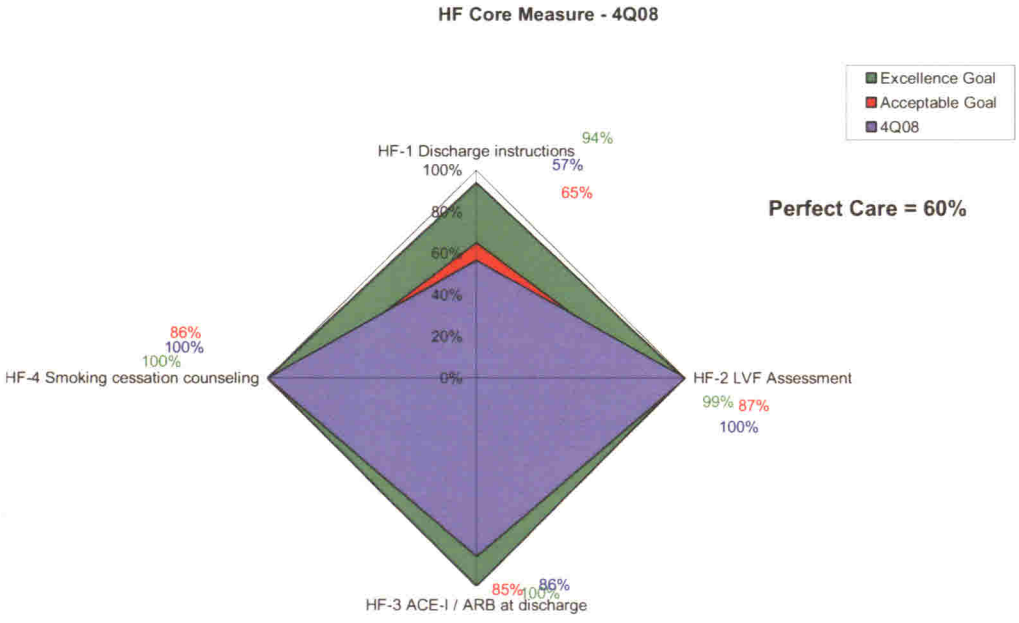
ValleyCare Health System Appendix D



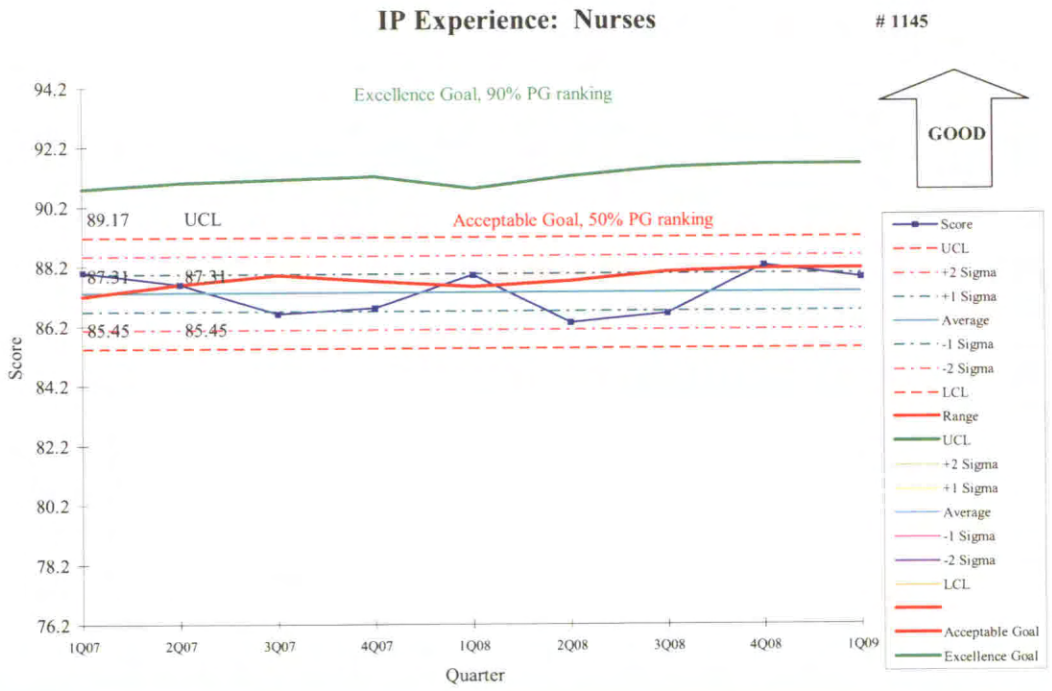


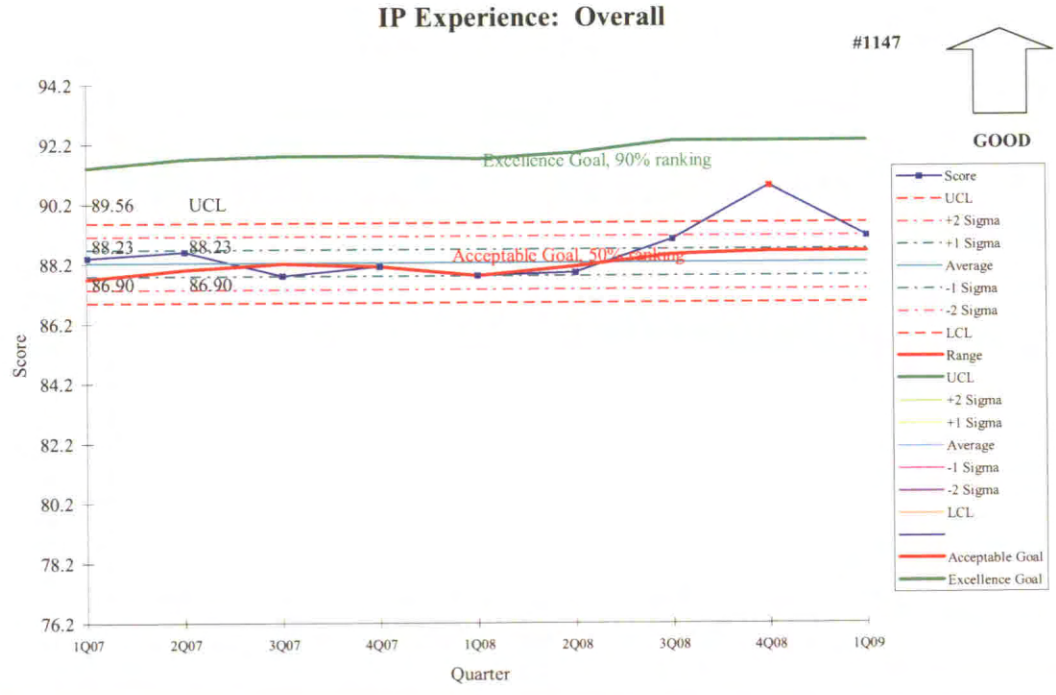
ValleyCare Health System Appendix E





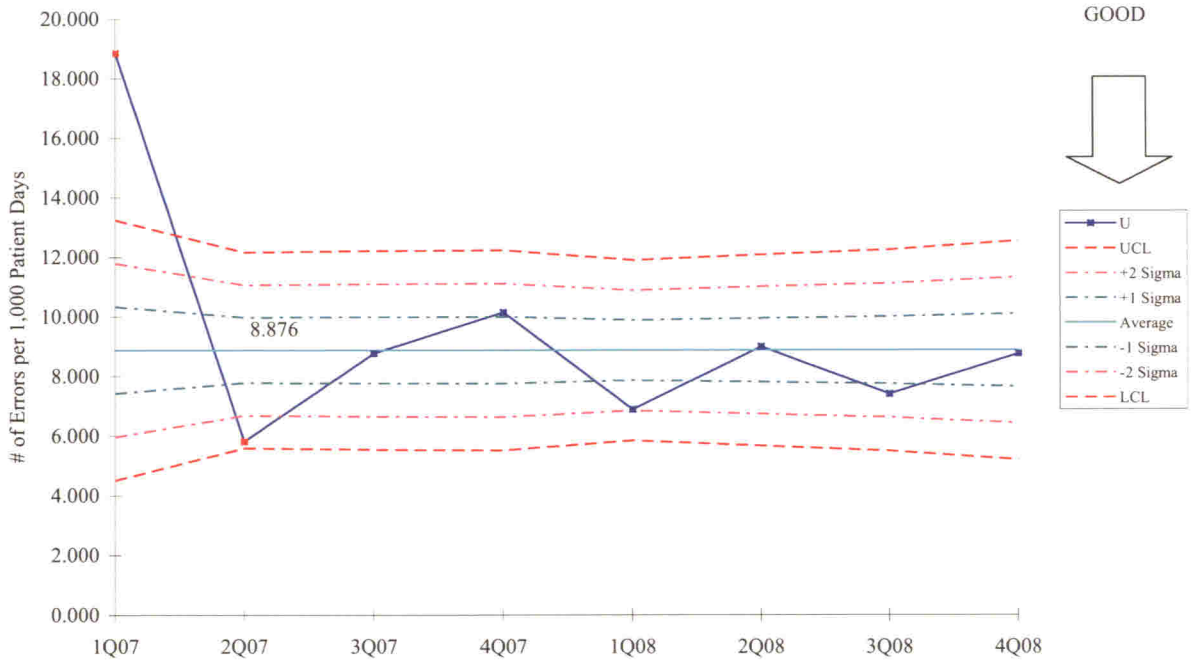
ValleyCare Health System Appendix F
Patient Satisfaction with Nurses and Overall





ValleyCare Health System Appendix G
Historical Trend Medication Errors Rates per 1000 Patient Days

#984

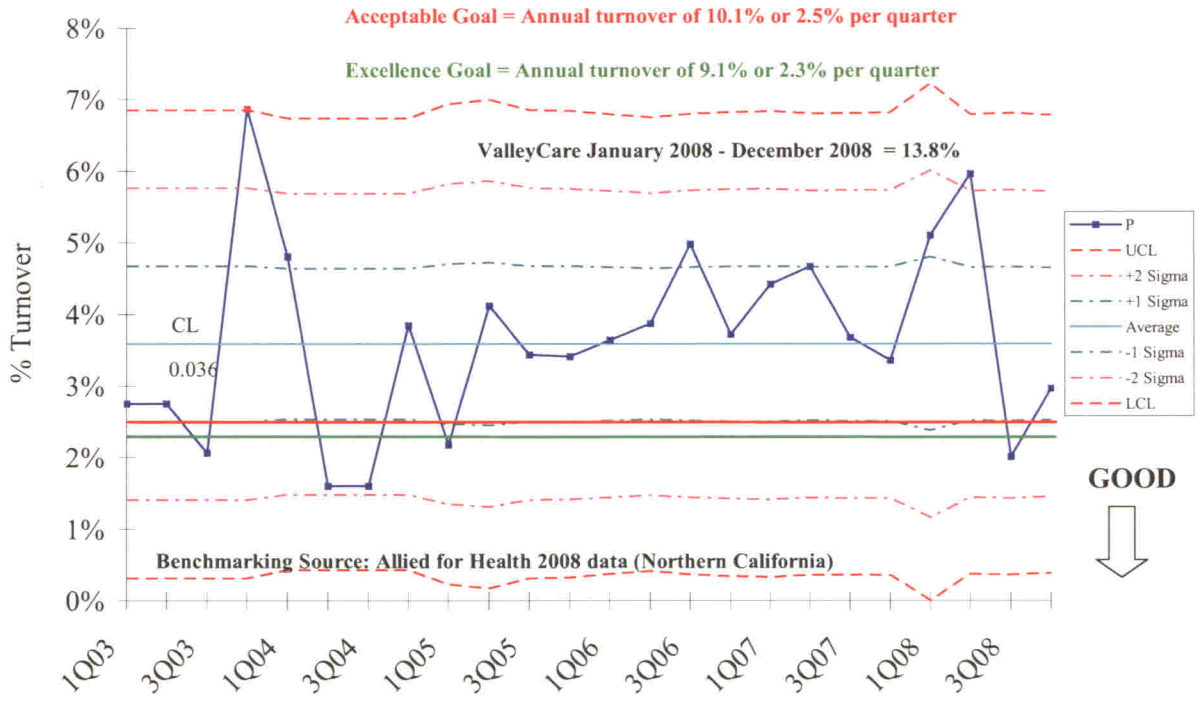


ValleyCare Health System Magnet Journey 2007-2009		Completed
9/2006	Chief Nurse Executive, Leaders attend Magnet conference; Begin Gap Analysis	Oct-06
09/07	Magnet Gap Analysis submitted; Magnet Grant awarded: Betty Irene Moore Nurse Initiative	Nov-07
11/07	Research Council Kick Off dinner w/CNE; DNP student appointed Magnet Coordinator	1-Dec
01/2008	Magnet Education Module by Coordinator; Posted on Intranet	7/1/2008
2/2008	Magnet module presented at Nurse Quality Council; Organizational theory research	2/12/2008
2/2008	Preceptor Agreement; BIMNI Grant Summit in San Francisco; Meeting w/Magnet Preceptor	2/19/2008
2/2008	Magnet Education, Coordinator Attended Magnet Class; Magnet Report to CNE	3/12/2008
03/08	Gap Analysis to Consultant; Reviewed self governance structures through Gap Analysis	4/1/2008
04/8/08	Press Ganey Survey presented at NAM; identif. communication, shared decision making	4/18/2008
4/2008	Transformational leadership shared gov research presented at Councils, nsg meetings	5/1/2008
8/7/08	ANCC Magnet Consultant; Attended Nsg Adm & NQC Council Meetings; Report received	8/8/2008
8/15/08	Joint Commission Survey; Submitted to BIMNI: CHF grant proposal	10/01/2008
10/14/08	Coordinator to ANCC Magnet Conference in Salt Lake City; report to CNE share gov.	10/20/2008
10/23/08	Chair & Coord to Research Conference; UCSF Ctr for Nursing Research and Innovation	11/4/2008
12/08	Increased shared decision making at NAM; Practice Council; Magnet Consultant at VC	12/12/2008
1/24/09	Coordinator: CNL certification; 1/28 Professional Development Council Kickoff	1/28/2009
2/5/09	Magnet update at NAM, NQC-NPC 2/12; 2/18 Research MOU w/ UCSF; Operating Council	2/26/2009
4/6/09	Magnet report at NAM CNE and Research Council to UCSF; Kickoff Coordinating Council	4/9/2009

ValleyCare Health System Appendix I

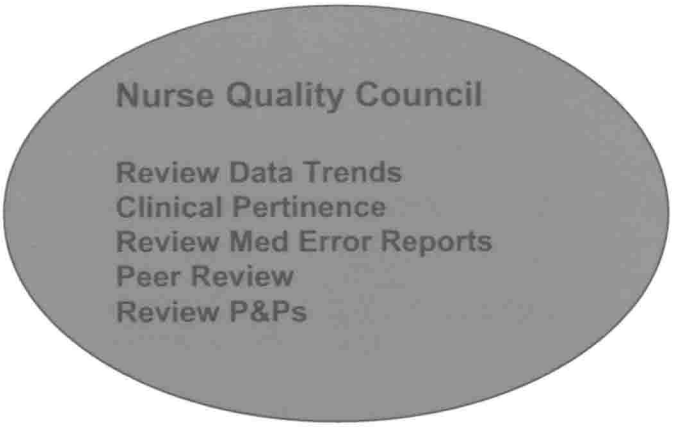
1053

Turnover Rate: Full- & Part-time Nurses



Appendix J-1

ValleyCare Councils 2003-2008

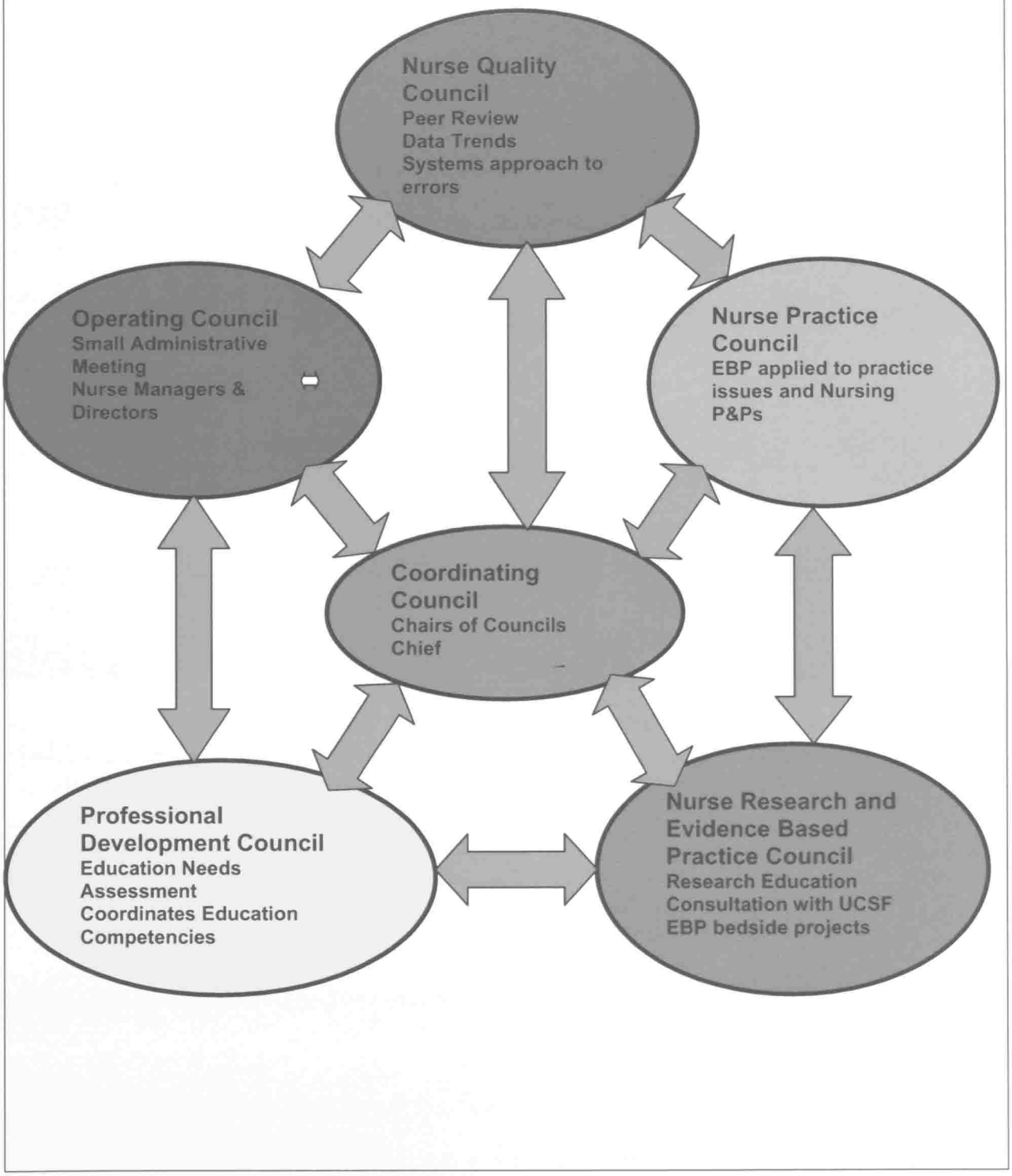


Established 2003 with Performance Improvement Teams

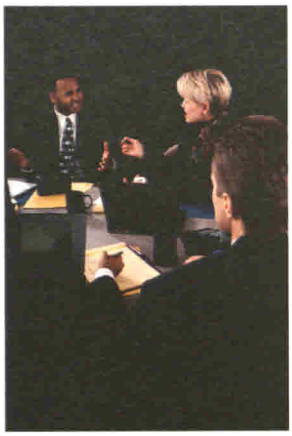
Established 2007 following Unit-based Research Contests

Appendix J2

ValleyCare Health System Nurse Councils 2009



Appendix K



Leadership Workshop

Topics Include:

Transformational Leadership
Situational Leadership
Communication
Team Building
Conflict Resolution
Coaching for Performance
Interactive Scenarios

Workshop is offered on three dates:

Feb. 27th in 2 West Conference Room

March 16th in the Medical Plaza Building

April 20th in the Medical Plaza Building

Time for both classes: 0900 - 1500

CE's provided Call 373-8085 to register

Appendix L
Examples of Errors disclosed in small groups

The Safe Environment	Issue shared by staff	Action
Skilled Nursing Unit reported to Infection Control RN then Nurse Quality Council	Silver impregnated silicone urinary catheter entrapment	Materials Management RN investigated Hospital wide Nurse Alert
Nurse Quality Council	Food and Nutrition Services reported patient meal trays left in rooms: infection control issue, lowers pt satisfaction	Discussion of causes at NQC Intradepartmental- Food and Nutrition Services Ongoing education plan, review at Skills Days
New RN Residency Program	Nurses spend too much time looking for meds that are printed on Medication Administration Record (MAR), not in med cassettes Night shift uses overrides and the nursing supervisor to obtain meds	Intra-departmental issue: Pharmacy contacted, fact finding, taking to NQC for discussion, develop a plan for measuring complaint
Nurse Quality Council	Present on admission Pressure Ulcers not documented by MD	Developed form for MD to sign to document pressure ulcer; discussed sticker
Nurse Quality Council	Pharmacy referral: orders not scanned to pharmacy in timely manner	Council identified possible causes and solutions of scanning delays, stamped sent, Pharmacy did not receive
Nurse Quality Council	Pt weights are not entered into the computer order system, MS4	Education for staff nurses on council to take back to units Track through MS4 audits
Nurse Quality Council	Difficulty finding supplies; difficulty locating items on supply carts	Taking issue to Operations Council; forming task forces on units
Nurse Quality Council	Low rates of medication errors reported at January 09 meeting Staff nurses stated reporting system takes too long, unsure about what needs to be reported, unfamiliar with screens	Quality Improvement contacted, received an instruction sheet and a HW e-mail with examples of what should and should not be reported Members will ask staff if instructions were useful. Error reporting computer stations at Skills Days 2009

Valleycare Health Systems

February 18, 2009

Volume 2, Issue 2

Critical Care Team Newsletter

Inside this issue:

Manager's Corner:

Although, our last month our staff meetings were a bit uncomfortable - I hope the take home message was that Kathy and I are in the hot seat when the ICU does not perform at expected levels. We do have problems with pressure ulcers and that has to improve without question. We do have individual performance issues that have arisen and those have to be corrected. I hope that we are able to separate ourselves from feeling like we are victims of what we are being told to do, to feeling and being empowered to make positive changes. That will mean, we will have to do things we don't always agree with or understand. I ask for participation in various task forces and committees and if you choose not to take me up on it, I ask that you please not complain about the decisions your peers and I make. I DO understand that you all are working very hard, but what I want for you to take-away is that working harder is not the answer, working smarter – paying attention to the smallest details, following isolation and standard precautions 100% of the time is expected, placing the EKG leads on properly every time, keeping your charting current, co-signing your orders and chart checks at shift change MUST be done, every day. If there are barriers to accomplishing these very important expectations, let's talk about and creatively resolve THESE ISSUES. Deb spent some time at the bedside with a few of you observing and guiding practice. What she discovered was there are MANY SYSTEMS problems that are dramatically impacting your ability to deliver the best in patient care. We cannot blame all of our issues on our system problems, but must continually strive to improve our individual practices. I have heard that many of you are studying to take the CCRN exam – Wow, this is wonderful!! – you should feel proud as do I that you have taken it upon yourself to "grow your practice"!!! Change IS difficult, but together we can make our CCU amazing: a place where you are proud to work and recommend. Hang in there – we ARE making progress!! As most of you know my door is always open for whatever you need.

This month's Sweethearts:

Feb. 3: Alfa

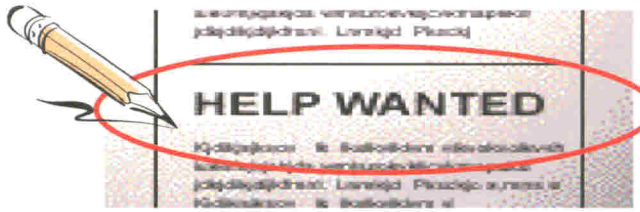
Feb. 12: Robyn

Please wish these 2 extra SWEET nurses a very Happy Day

PS. Check your mailboxes ladies (Jan. B-Day folks should also take a peek in their boxes)

System Problems/ Updates:

- Insulin Order Set
- Lab Daily Printouts
- Monitors in ICU
- Bed Surfaces
- ACLS Recertification
- Flowsheet
- Ice Machine in ICU
- Electrolyte Order Sets
- IV Drip Reference Book
- Outdated Policies
- "Missing" Competencies
- Restraint Policy #61
- IV Adult Therapy #900.03
- Normoglycemia Protocol
- CV Order Set Revised
- Fall Risk Assessment Tool
- Inconsistent I/O's calc's



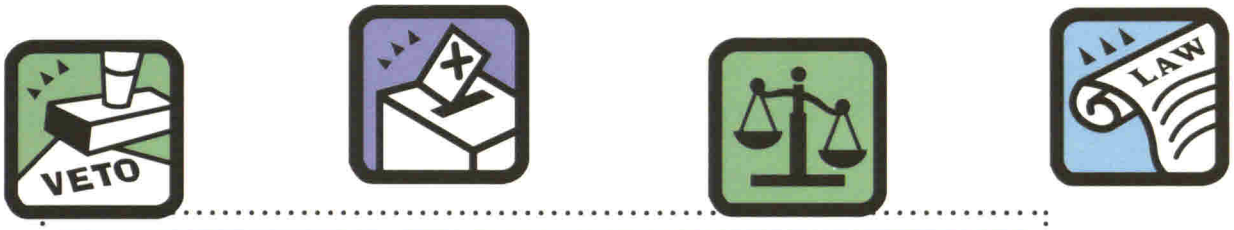
Multiple Positions Available

Wanted: Creative Problem Solvers

Needed: ASAP!

Qualifications::

- **Courageous** - able to boldly Face the Ugly *aka ineffective system problems*
- **Silver-tongued Communicator** - able to soothe ruffled feathers & calm the crazed
- **Savvy Negotiator** - able to creatively seek out Win-Win solutions
- **Ring Leader** - able to 'round up the troops & walk WITH them on the road to success
- **Broad Shoulders** - able to support the heavy burden of change anxiety
- **Compassionate** - able to see past the frustrations & failings to the beauty & pride of exceptional practice standards
- **An Attitude of Gratitude** - a ready supply of Bright Smiles, Contagious Laughter & Heartfelt Thanks



Shared Governance = Creating a Unit Based Council

The reward of a thing well done is to have done it.. Ralph Waldo Emerson

In order to shift more decision making power to the hands of those directly responsible for patient care, each department will be creating individual Unit Based Councils. All CCU staff (nurses, unit clerks) are encouraged to participate. Members will decide how frequently to meet, will address current issues, propose solutions, recommend team building activities, take ownership of problems, create solutions and most importantly act as catalysts of change! They will discuss issues, formulate resolutions and propose unit based goals and directions: How can we improve our current processes? What changes can we implement that will make working in CCU a place of pride? How can we increase patient and EMPLOYEE satisfaction? Currently, the administration is working on developing a "clinical practice" bonus program (details will be published this summer) – basically, a clinician who fulfills the list of requirements will receive a monetary bonus - awarded each year based on accomplishments and most importantly on active participation in leadership & practice activities such as Unit Based Councils!! So, here is your golden opportunity to change whatever frustrates or interferes with your ability to BE AMAZING! We will discuss and nominate our first TEAM LEADERS (one from each shift) at our next staff meeting.

Welcome - Meet our newest CCU Team Members!

Justlyn Stover - Unit Clerk—per diem, days. Actually Justlyn has been working per diem here at VHS since Nov. 2008, but was missed (Deb's error - so sorry) in our previous newsletters – please take a moment to introduce yourself & get to know this very interesting mom of 2 (Jaymesen 16, Jechia 25). When she is not working here, she is singing in the choir, tending to her rose garden, caring for her 2 Maine Coon cats — who are noted for being extremely clever & may have be related to raccoons — Justlyn's cat figured out how to manipulate the auto-garage door to facilitate his desire to explore! **Kate Brown** - is our newest day-shift RN, she is a lovely transplant from just outside of Oxford, England. She loves to snowboard, ride her mtn bike & of course her 2 kids: Zoe 3 & Oliver 6. They have "jump the pond" to join us secondary to her husband's new job in Silicon Valley. Kate is just a joy to work with: smart, friendly, with a sharp wit and easy smile! **Mary Gwin** is our newest unit clerk, she will be working 3 days/week, the 11pm-7am shift. When Mary is not processing orders and helping our nurses, she spends her free time participating in stock market investment groups — wow — Mary obviously has the heart of a tiger and nerves of steel — working in ICU must be a piece of cake compared to the volatility of today's bear market! **Alejandro Canto** — is our newest nightshift RN — more details to follow as he is very busy moving his family from Florida! **Jacquie Buckley**— is back—hip-hip hooray — you were missed buddy!!!!

One word frees us of all the weight and pain of life: That word is

News from NQC

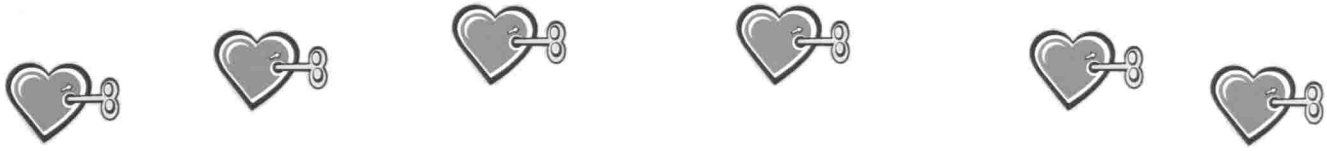
- Admission Weight will be used to calculate all IV drips unless otherwise noted per specific P&P (ie. Heparin).
- All specimens MUST be labeled AT THE BEDSIDE & involving the patient/ family whenever possible - initial, date, time, add descriptors such as drawn from right arm PIV – the lab will discard any specimen "mislabeled" & necessitating a re-draw! P&P 600.01
- Per Magnet Quest - all units to create unit-based councils in order to fulfill shared decision making model requirement – ER = 1st unit: staff feel empowered to make decisions/ changes quickly that directly effect them
- INFA NOTE - coming soon – still working out "bugs" :)
- Med errors have increased with our census – continue to be vigilant – just because it is preprinted from pharmacy does not mean it is perfect!!
- Green Arm Bands are coming = NKDA – trialed in peds to clearly indicate that the pt has NO allergies, and not the possibility that the red band just fell off.
- Restraint P&P is currently under review to meet revised JACHO requirements - NO TRIAL PERIODS - "ok" to release for CMST checks, repositioning - RN MUST be in attendance.
- Adult IV Therapy Protocol is complete! P&P 900.03
- Would the reward of receiving a Coffee Cards for completing Quantros make it less burdensome?
- New safety goggles are coming!
- PICC P&P #900.84 updated!
- Bed Decision tree updated to include Deep Tissue Injury - see blue bedside binders

News from NAM

- Linen Service still not performing well - please email concerns/complaints to Joe Macias
- Krames Upgrade? - Pt. Educ. team reviewing benefits / maintenance requirements of adding a "custom content builder" option to our current pkg
- Comfort Care Preprinted Order Set - currently at P & T, Code Status Order Sheet - remains in development stage - difficult to create & easily integrate new Calif. POLST legislation - "stay tuned"
- Hospital Wide Skills Days 2009 set - June 26, Fri, Pls – July 14, Tues, Lvmr – Aug 11, Tues, Lvmr – Flyers to follow w/ more info
- NICU Renovation is Complete – Open House 2/19, Thurs, noon-2pm Please stop by!!
- MRSA Screening - Phase II = All ICU / NICU admits/tfrs + re-admits w/in 30days, Spine and CABG surgical pts, newborns if mom has MRSA hx
- Please carefully document all Trauma injuries/wounds as such so they are NOT misdiagnosed as HAPU!!!! (ie. lip wounds from traumatic intubations)
- VAP free in December 2008!!!
- Pharmacy has a working Action Plan to address SB 1875 requirements aimed at reducing medication errors - FYI if a Dept of Health officer inquires.

Several Problems Exist as Barriers to Superb Patient Care

Problem	Intervention	Status
ICU Ice Machine Broken	Repair or Replace	Resolved! unit repaired
Insulin Order Set - Confusing, MARS do not always match pt status	See proposed changes to Order Set	Pending: review by ICU staff
Daily Lab Printouts – waste too much paper, and RN's time to review repetitive results	Robyn assembled a "sample" (one pt, one day = 63 pages, only 9 necessary, others repeats)	Pending: Shelley awaiting on Virginia to meet to discuss corrective action
Monitors in ICU - full disclosure only storing last 60 minutes of rhythms, not last 72 hours	Formal Complaint sent to GE – software glitch reprogrammed	Resolved!
HAPU rates increased last "quarter"	New Bed Surfaces purchased with Auxiliary gift $$	Pending: scheduled to arrive ?
ACLS classes impacted – only offered 4 x year	Additional classes added	Resolved! See intranet for details
Double Charting - Too many forms, etc.	CCU and Med Surg Flowsheets revised	Pending: Workflow One – hopefully by 3/1
Electrolyte Replacement Protocols - Outdated	Preprinted Order Sets	Pending: awaiting CV surgery review
IV Drip Reference Book - Outdated	Pharm. Student Prepared "bones"	Pending: Deb & Missy to review & modify into "nurse-speak" - 3/15
Outdated CCU specific Policies	Convene a special task force - unit based council to review / update	Pending: council formation
"Missing" Competencies - Dural Drain, Epidural Catheter	Deb obtained copies from 2N, will create ed. modules & update competency	Pending: 3/15
Restraint P&P #61	Outdated - JACHO's new limitations	In committee – should be finalized soon - 3/31
Adult IV Therapy #900.03	Outdated - too many "sub" policies with conflicting data points	Resolved! "sub" policies deleted, rolled into ONE P&P - s/b posted on intranet asap
Normoglycemia Protocol	Several "typo's" errors of inconsistency	Pending: task force/unit based council formation
CV Order Sets - Outdated	Janine to re-write after gathering input from several parties, Deb to post to intranet	Pending: Janine waiting on final approval from surgeons
Fall Risk Assessment Tool - confusing	Reformatted, copies in all blue binders, new flowsheet to reference tool	Resolved!
Inconsistent I's & O's - Doc's & RN's frustrated, pt's fluid balances difficult to accurately track	Need a clearly defined P&P	Pending: council formation
Hill-Rom Advance Bed Frames—"scales are old & unreliable" - per Hill-Rom rep	Shelley to discuss w/ J. Berg & Joe Macias	Pending



Educational Opportunities

Date	Day	Time	Class	Where
2/24	Tues	1000-1300 1300-1600	Pressure Ulcer Prevention *Email Shannon Stewart or Jennifer Berg*	Pls—2 West Conference Room
2/25 & 2/26	Wed, Thurs	0630 & 1130	Hypothermia In-services *Email Deb Candee to sign-up*	ER / ICU
2/27	Fri	0900-1500	Leadership Workshop *Email Shelley Barnhill to sign-up*	Pls—Phoenix Bldg. 5725 Las Positas Blvd.

Date	Day	Time	Class	Where
3/3	Tues	0800—noon	Vasoactive Drips & Hypothermia *Email Deb Candee to sign-up*	Pls—Cafeteria Room 2
3/6 & 3/13	Fri	0830-1630	ACLS *Call Barb King x8090 to sign-up*	Lvmr—Nursing School
3/20	Fri	0800-1400	Dysrhythmia Interpretation *Call Barb King x8090 to sign-up*	Lvmr—Nursing School
3/27	Fri	0800-1530	Renal Symposium *Flyers out soon!*	Pls—Phoenix Bldg. 5725 Las Positas Blvd.

CCRN REVIEW COURSES

Laura Gasparis Vonfrolio, RN, PhD

www.greatnurses.com

Mar. 3 & 4: Ramada Hotel, Irving, TX

Mar. 18 & 19: Holiday Inn, Atlanta Georgia

Apr. 15 & 16: Greater Columbus Convention Ctr, Columbus, OH

May 20 & 21: Nickelodeon Universe, Bloomington, MN

July 23 & 24: Caesars Palace, Las Vegas, NV

Sept. 16 & 17: Holiday Inn, New York, NY

Sept. 24 & 25: Trump Taj Mahal, Atlantic City, NJ

AACN—National Teaching Institute

www.aacn.org

May 16 & 17: New Orleans, preconference

APIE - Opportunities for Improvement

Purpose:
Identify patient care / RN practice issues, system problems, clarify miscommunication, post event debrief, encourage critical thinking, creative interventions (shoulda, woulda, coulda), incorporate evidence based practices, new research, learning exercises, review key data points, opportunties to think outside the box to discover better, easier, more effective interventions

*MOST IMPORTANT = chance to practice being a TIGER = justify your actions & build your skills so that you can address hostile MD's calmly w/ confidence!! **

ASSESSMENT: _____

sometimes there is NO Problem - just a chance to practice being a Tiger

PROBLEM: How does this impact patient care (pathophysiology)?

_____

INTERVENTION: What could YOU have done differently? _____

_____

EVALUATION: Recommendation to prevent or possible system change:

_____

FYI: Please do not write "will try harder" obviously everyone looks sufficiently tired at the end of the day, so working harder is just not possible -- also it is EXPECTED that we all behave as humans, which means we are not perfect, BUT if we create system "checks" and lookout for each other, everyone, esp. the patient will benefit.

Example: A = I transposed my running balance -- subtracted, but should have added
P= pt has crackles & ↑WOB
I = will compare I/O to wt chg & investigate variance
E=modify the flowsheet to make it clearer Day totals followed by Night totals

Name: _____ Date: _____ Reference: _____

ADULT INSULIN ORDER SHEET - PROPOSED CHANGES

2. Initiate CBG testing:

   ☐ QID AC & HS (08:00 – 12:00 – 18:00 – 22:00) (if receiving Oral Diet)

   ☐ Q6H (06:00 – 12:00 – 18:00 – 24:00) (if NPO or receiving Tube Feedings)

   ☐ other:_____

Notes:

- *If patient is NPO for testing: continue CBG testing at AC & HS, cover TID only, per NPO scale*
- *If patient is transitioning from TPN or Tube Feeding to Oral Diet, change CBG testing to QID AC & HS, cover TID only, per Meals/Tube Feeding scale*
- *If patient is receiving TPN and Tube Feeding, continue to test and cover per TPN order set*

Consider more frequent CBG testing for patients who are unable to communicate symptoms of hypoglycemia (ie. intubated, sedated, confused, dementia)

4. Initiate subcutaneous rapid insulin (Novolog®) coverage:

   ☐ TID AC only (08:00 – 12:00 – 18:00) (if receiving Oral Diet)

   ☐ Q6H (06:00 – 12:00 – 18:00 – 24:00) (if NPO or receiving Tube Feedings)

   ☐ other:_____

Note:
Use of rapid insulin (Novolog®) at bedtime is discouraged.

COMMENTS: Does this make it clearer? Example: if patient changes from tube feedings to oral diet -- a new order would need to be scanned to pharmacy so they could produce a revised MAR. PLEASE comment & return to Deb by 2/27! Additional suggestions WELCOMED!