

Texas Nurse Staffing Trends Before and After Mandated Nurse Staffing Committees

Terry L. Jones RN, PhD



Nurse Staffing Legislation

- Ratios
 - California
- Public Disclosure of Staffing Levels
 - Illinois
 - Minnesota
 - New Jersey
 - New York
 - Rhode Island
 - Vermont

Nurse Staffing Legislation

- Nurse Staffing Committees
 - Connecticut
 - Illinois
 - Minnesota
 - Nevada
 - Ohio
 - Oregon
 - Texas
 - Washington

Evaluation of Ratios

- Nurse Staffing in California (10 studies)
- Effect on Patient Outcomes (9 studies)
- Effect on Nurse Outcomes (1 study)

Evaluation of Nurse Staffing Committees

- Nurse Staffing (0 studies)
- Effect on Patient Outcomes (0 studies)
- Effect on Nurse Outcomes (0 studies)
- Implementation Process (2 studies)
 - Oregon & Illinois
 - Wide variability in implementation

The Texas Experience

- 2002 Discretionary Rule Making Process
 - Safe Nurse Staffing Rules
 - CNO education & reporting structure
 - Staffing committee
 - 30% direct care nurses
 - Monitor & evaluate staffing plan
 - Consider nurse-sensitive outcomes
 - Policy for addressing nurse abuse & harassment

The Texas Experience

- 2009 Non-Discretionary Rule Making Process
 - Texas Senate Bill 476
 - 60% direct care nurses (selected by peers)
 - Voting privileges & meeting frequency clarified
 - Semiannual evaluation of staffing plan
 - Planned and actual staffing levels
 - Nurse-sensitive indicators & patient needs
 - Evidence-based staffing standards
 - Report to governing board


Study Purposes

- Examine nurse staffing trends before & after adoption of the discretionary and nondiscretionary safe nurse staffing rules in Texas;
- Examine variations in nurse staffing trends based on contextual factors.

Methods

- Secondary analysis of AHA Annual Survey
- Cross-sectional – 13 years
 - Pre-regulation Period 2000 - 2002
 - Post-Regulatory Period 2003-2012
 - Discretionary Rule Period 2003 - 2009
 - Nondiscretionary Rule Period 2010 – 2012
- Sample (313 hospitals)
 - Non-Federal Acute Care Hospitals
 - Survey data for ≥ 10 years

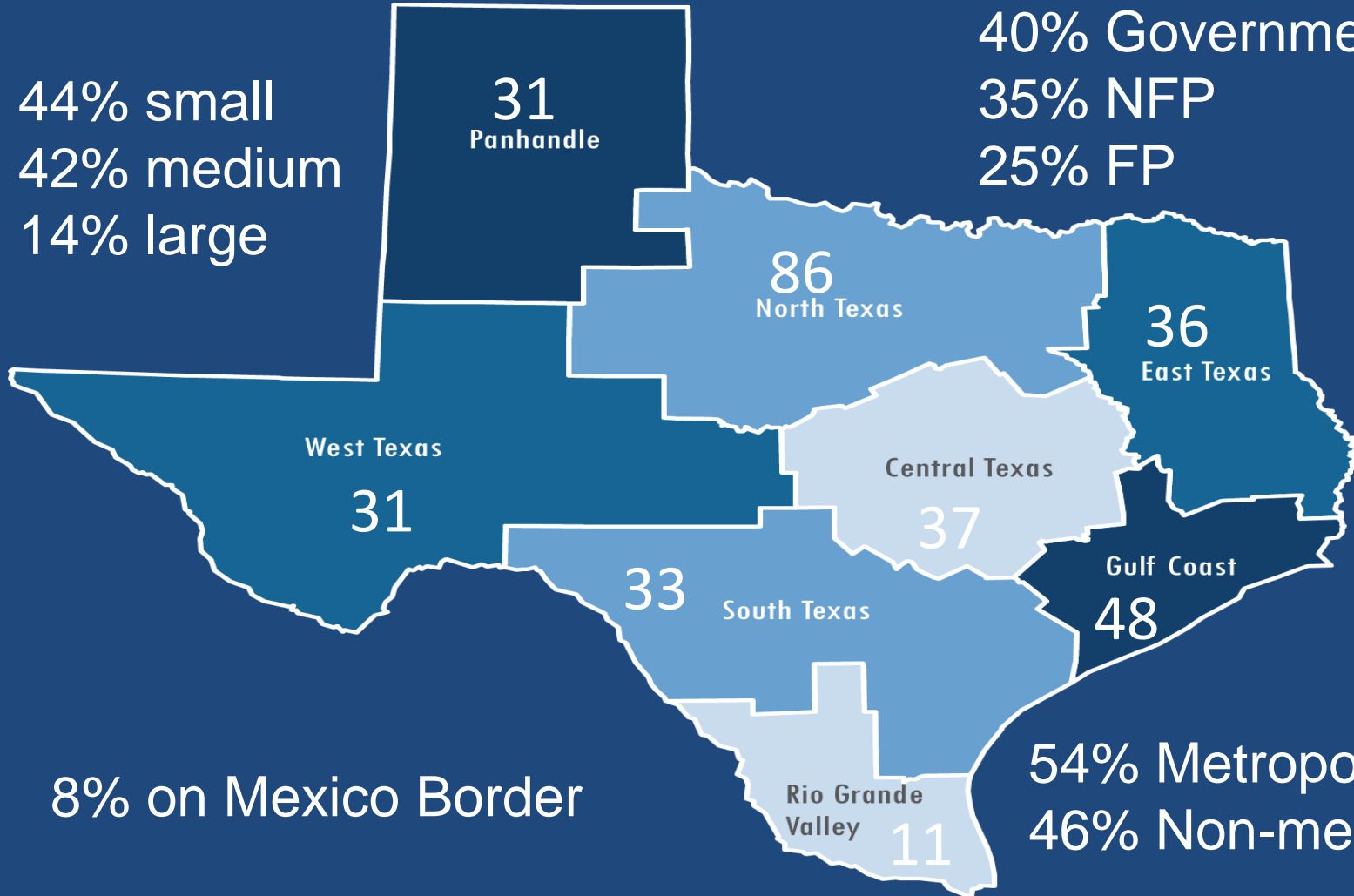
Study Variables

- 3 levels of staffing (total nurses, RNs, LVNs)
 - FTEs
 - Productive HPPD
 - RN Skill Mix

Adjusted for inpatient volume
- Contextual Variables
 - Bed Size, Ownership/Control, Geographic Location, Baseline Staffing Quartile

44% small
42% medium
14% large

40% Government
35% NFP
25% FP



8% on Mexico Border

54% Metropolitan
46% Non-metropolitan

Findings

- Statistically significant changes in nurse staffing between 2000 and 2012 ($F=26.76$, $2df$; $p<.001$)
- Variation in direction & magnitude of change
 - Total nurse staffing
 - 59% increased total staffing; median = .59 HPPD
 - RN staffing
 - 69% increased RN staffing; median = .96 HPPD
 - LVN staffing
 - 74% decreased LVN staffing; median = .51 HPPD

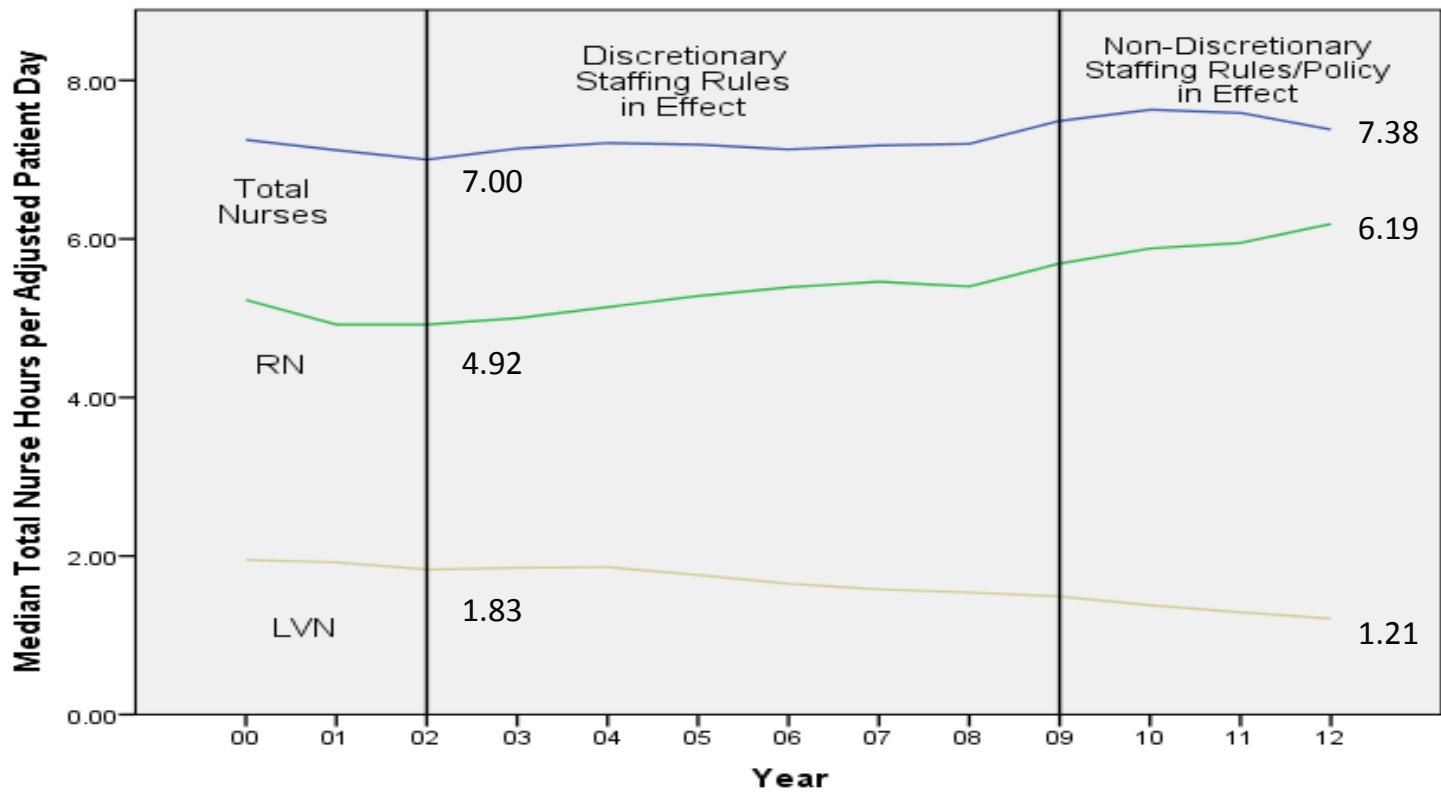


Figure 1. Total Nurse Staffing in Texas Hospitals 2000-2012

5% net increase

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

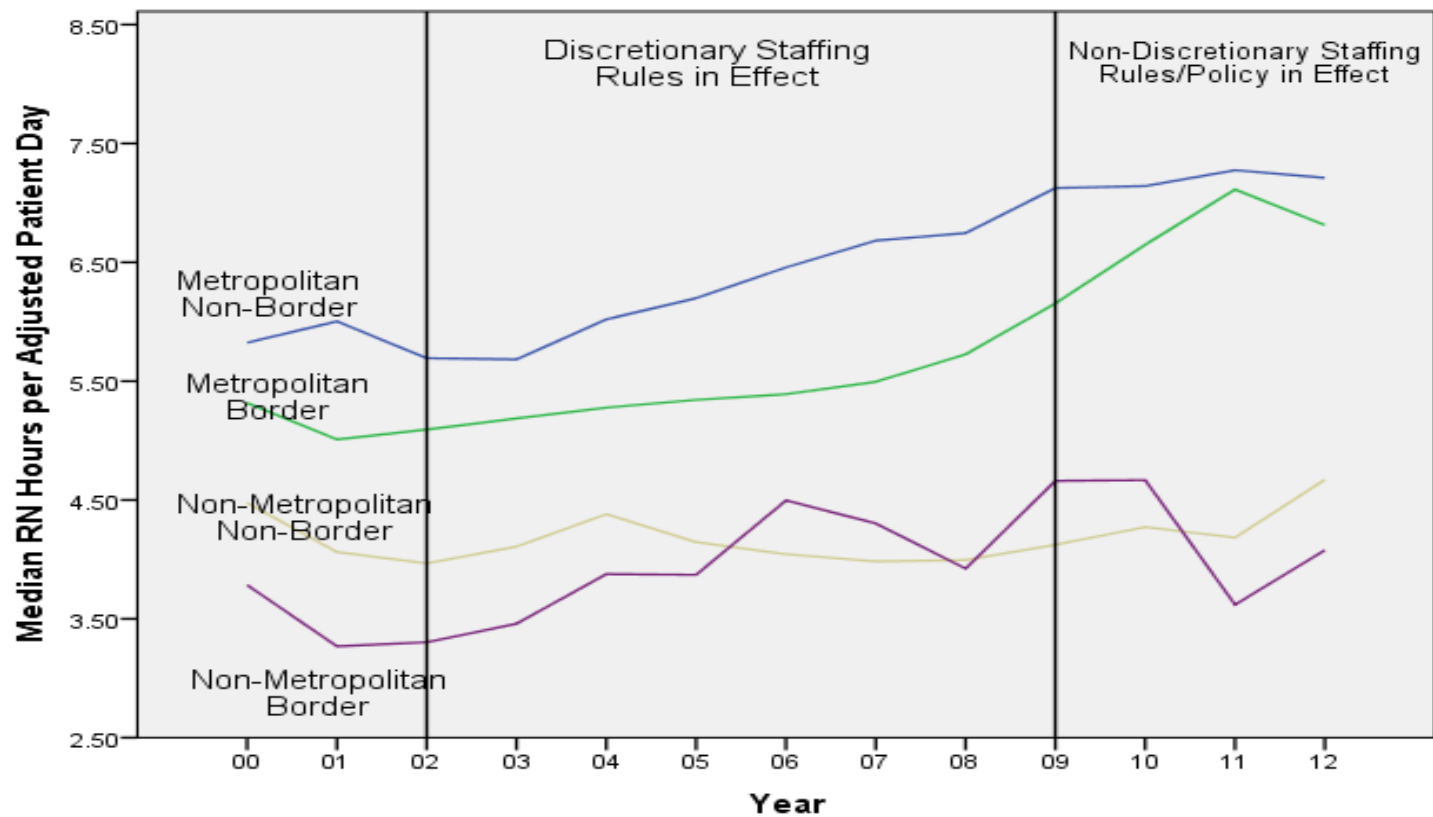


Figure 2. Variation in RN Staffing Across Geographic Locations

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

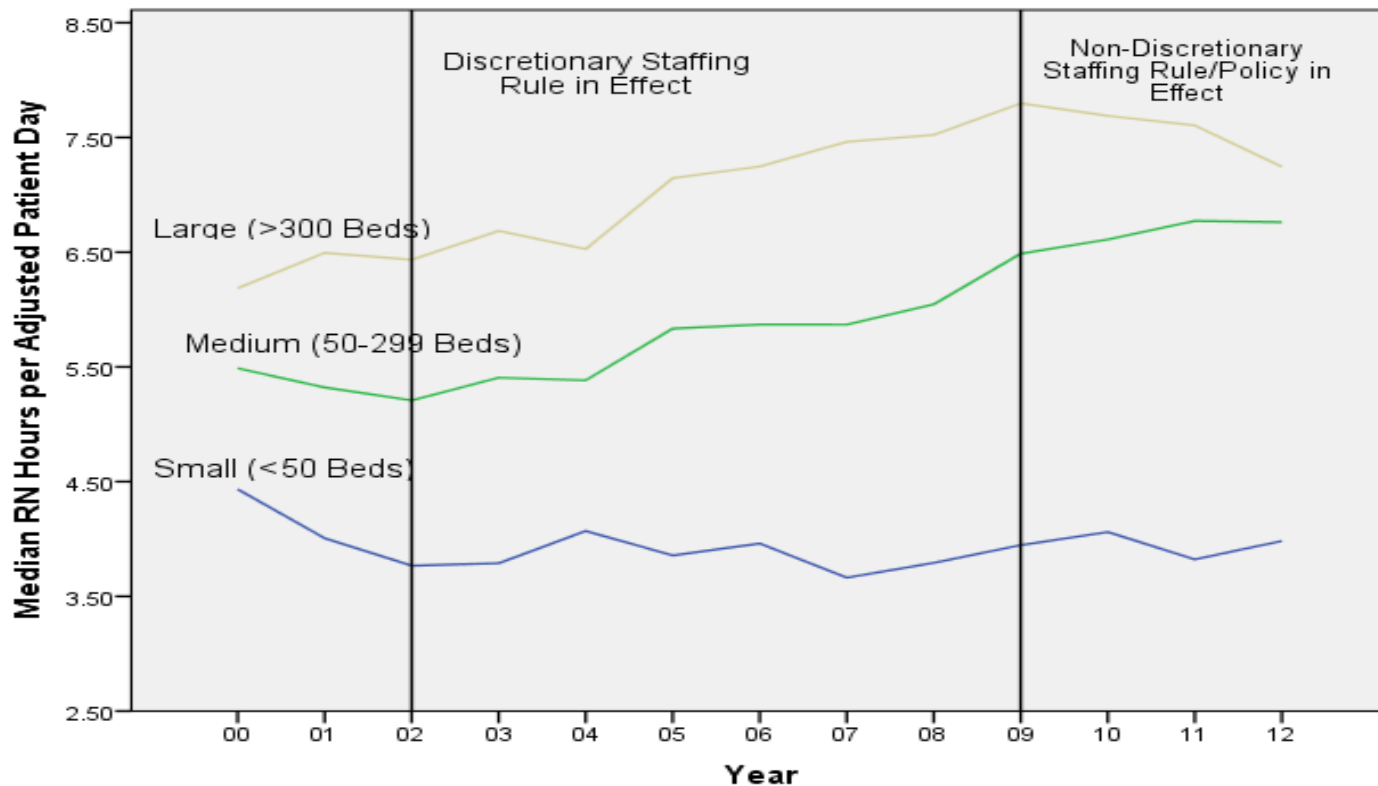


Figure 3. Variation in RN Staffing by Hospital Bed Size.

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

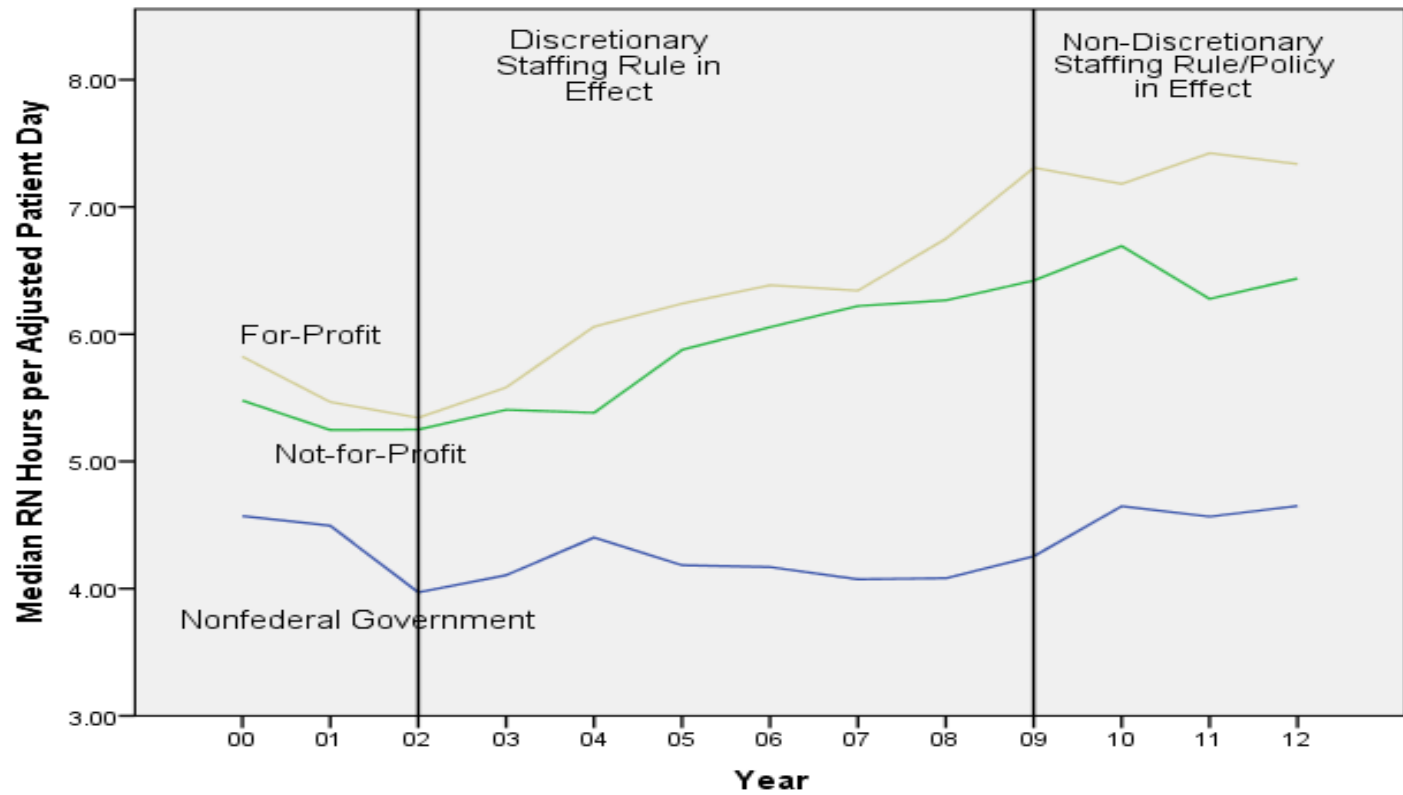


Figure 4. Variation in RN Staffing Across Ownership/Control Structures

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

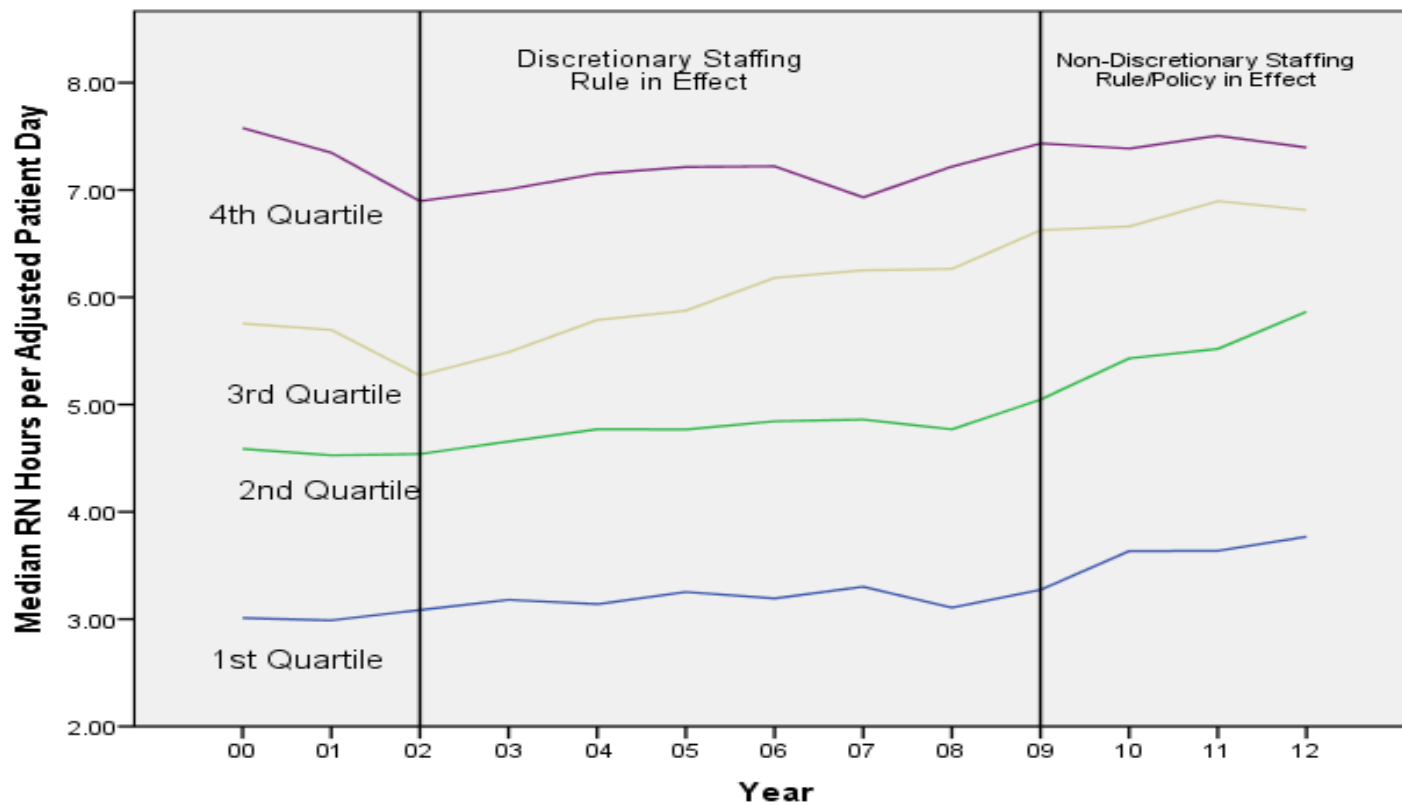


Figure 5. Variation in RN Staffing Across Baseline RN Staffing Quartiles

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

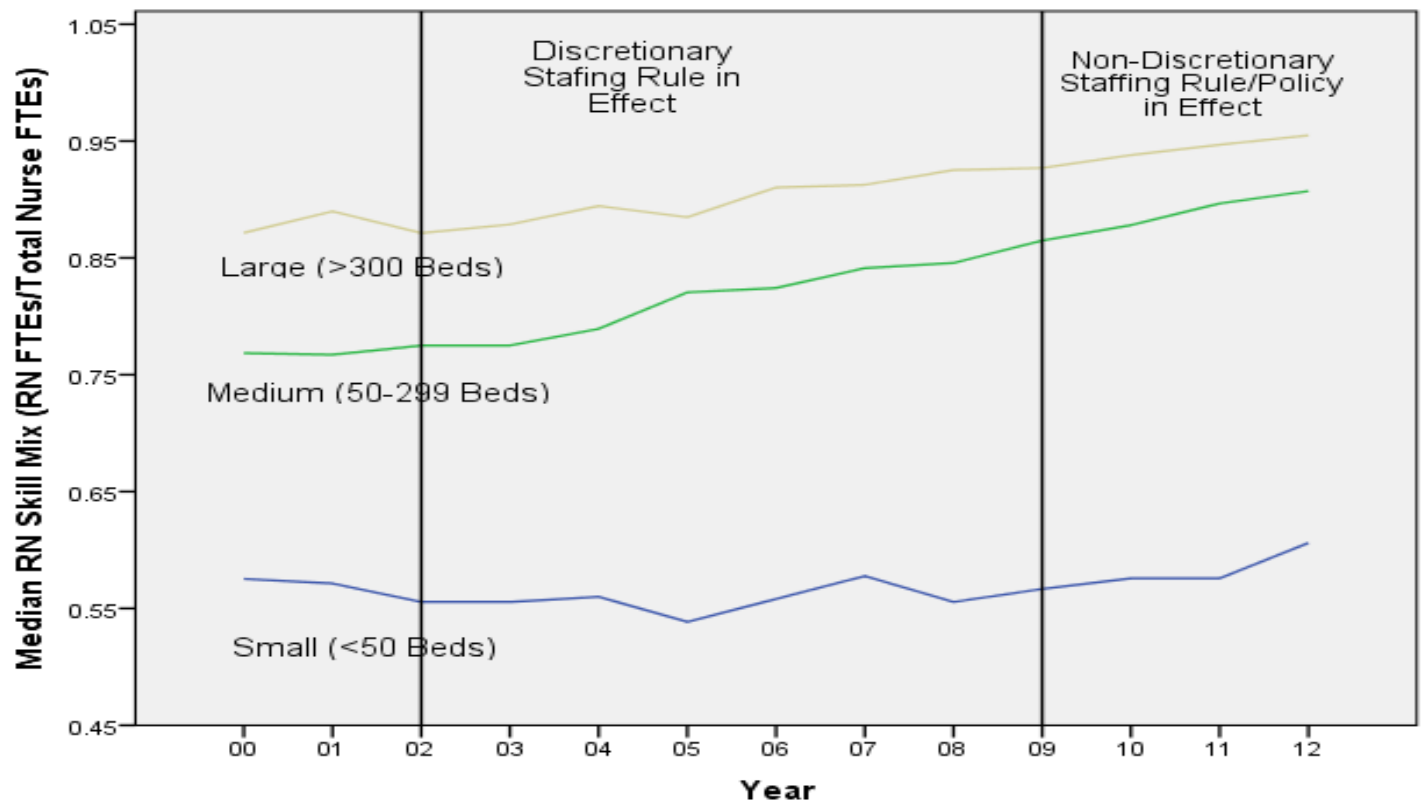


Figure 6. Variation in RN Skill Mix (Proportion of RNs/Total Nurses) by Hospital Bed Size

Jones, T., Bae, S. H., Murry, N., & Hamilton, P. (2015). Texas nurse staffing trends before and after mandated nurse staffing committees. *Policy, Politics, & Nursing Practice*, 16(3-4), 79-06.

Discussion

- Patterns of change
- Magnitude of change
- LVN utilization
- Effect of discretionary & nondiscretionary rules
- Limitations
 - Administrative database
 - Economic recession
 - Nursing shortage

Conclusions & Recommendations

- The effects of nurse staffing committees on nurse staffing remain speculative
- Additional research is needed
 - Compliance with staffing rules
 - Level of participation (quality & quantity) by staff nurses
 - Effect of staff nurse input on staffing decisions

