Texas -Taxonomy of Error Root Cause Analysis of Practice – Responsibility (TERCAP) Pilot Program Report

Summary of Request:
The purpose of this agenda item is to provide an analysis of the two (2) year TERCAP Pilot Program with staff recommendations and to request Board approval for future directions.

Historical Perspective:
In 2011, the 82nd Legislature passed SB 193 allowing the Texas Board of Nursing to adopt a standardized error classification system for utilization by nursing peer review committees. After passage of the bill, a workgroup was formed to advise the Board on implementation of the project. Following instrument, protocol, and data collection survey development, letters inviting participation in the Pilot were sent to hospital systems all across the state followed by training workshops in the summer of 2012 in Austin, Houston and the Dallas/Ft. Worth area. Approximately 200 nurses, representing peer review committees from 50 hospitals, attended the training workshops. Participants learned how to utilize the Texas TERCAP Protocol and Instrument for incidents reviewed by Peer Review Committees, but not deemed board-reportable.

Data collection through the Texas TERCAP Online Database from participating hospitals began on September 1, 2012 and ended August 31, 2014.

In order to assist Board staff with implementation and data analysis, Dr. Mary Beth Thomas and Dr. Mari Tietze were hired to provide consultation on implementation strategies and an overview of the data to identify any important trends. Dr. Tietze also assisted Board staff in reformatting the data to provide better analysis and statistical review. Statisticians Dr. Ben Domingue and Christian Jackson were also hired in June, 2014 to assist with statistical analysis. Attachment A contains the mid-Pilot report developed by Dr. Mary Beth Thomas, Dr. Mari Tiezte and Board staff.

Staff Recommendations:
Move to extend the TERCAP Pilot Program for an additional two year period in order to continue collecting more data and in order to provide a more comprehensive and extensive analysis of the impact TERCAP is having upon nursing practice in participating organizations. At the end of the two year period, staff will develop an evaluation for the purpose of determining if there is sufficient support for incorporating the model into Board policy.

TERCAP
Taxonomy of Error Root Cause Analysis of Practice-responsibility

Texas TERCAP Pilot Project
Report to the Texas Board of Nursing

October 23, 2014

ABSTRACT

Identifying factors surrounding nursing practice errors, also called practice breakdown, supports a comprehensive, just pathway to error resolution and provides a proactive approach in the assurance of patient safety: an approach the Texas Board of Nursing believes is important in fulfilling its mission of public protection. The Texas TERCAP Pilot Program is a two year pilot that allowed the Board to receive and compile practice breakdown incidents utilizing a 44 item online instrument from nursing peer review committees in selected Texas hospitals. Data collected during the two year pilot are reviewed as well as recommendations for the future.

Purpose of the Pilot

In 2011, the 82nd Legislature passed SB 193 allowing the Texas Board of Nursing (Board) to adopt a standardized error classification system for utilization by Texas nursing peer review committees. Consequently, the Board implemented a pilot with selected peer review committees from hospitals around the state. The Taxonomy of Error Root Cause Analysis of Practice-responsibility (TERCAP) online instrument was utilized to identify practice issues, including practice breakdown, normally investigated during the peer review process. A practice breakdown is defined broadly as the disruption or absence of any of the aspects of good practice. Often these cases involve errors or near misses.

The pilot allowed representatives from participating sites to enter nursing practice breakdown incidents into the TERCAP state-wide online data base. The practice breakdown incidents appropriate for the pilot included cases that a nursing peer review committee had reviewed and determined were not required to be reported to the Board (See *Texas Administrative Code Rule 217.16, Reporting of Minor Incidents*). These cases included minor incidents which are events that indicate the nurse's continued practice does not pose a risk of harm to patients or other persons; or when remediation is reasonably expected to adequately mitigate any risk and the nurse successfully completes the remediation. Peer review cases meeting the following criteria were included in the Texas TERCAP Pilot Program:

1. the case concerns a nurse who was involved in a practice breakdown;
2. the case involves one or more identifiable patients (if more than one patient was involved, data is to be gathered and submitted on the patient with the most harm or risk of harm);
3. the case allows for all or almost all of the data collection instrument fields to be completed; and
4. the case is reviewed by the institution's peer review committee and not deemed reportable to the Board.

Objectives of the Pilot

The Texas TERCAP Pilot Program supports the fundamental mission of the Board in the assurance of patient safety and public protection. As such, the Texas TERCAP Pilot Program was developed to:

1. advance patient safety by analyzing incidents of nursing practice breakdown;
2. evaluate factors surrounding error events to facilitate an understanding of the etiology of nursing errors;
3. promote the development of methods to mitigate those errors; and
4. create a peer review environment that is transparent, positive and supportive of this error analysis effort.

These objectives provide a proactive approach in the assurance of patient safety: an approach the Board believes is important in fulfilling its mission of public protection.

Methods

Background and Recruitment

The pilot program's online data base became functional on September 1, 2012. The online data base collects confidential error events that have been reported to a nursing peer review committee and deemed not reportable to the Board. Analysis of the pilot ended on September 1, 2014, with a report to the Board on October 23, 2014.

Submission of the practice breakdown cases in the Texas TERCAP Pilot Program is voluntary and confidential. Letters inviting participation in the pilot were distributed to hospitals around the

state. Responses were favorable with 163 nurses, representing peer review committees from 52 hospital systems and 92 individual hospitals, who participated in training workshops during the summer of 2012 in Austin, Houston, and the Dallas/Ft. Worth area.

Data Collection and Instrument

Data collection for the Texas TERCAP Pilot Program is through a 44 item online instrument which is based on the National Council of State Boards of Nursing (NCSBN) TERCAP© instrument. The national initiative was developed to provide a method for capturing nursing practice errors reported to boards of nursing. This national online data base is available to all participating boards and provides a standardized approach for analysis and trending.

While the national instrument captures practice breakdown cases that are required to be reported to a board of nursing, the Texas TERCAP Pilot instrument collects practice breakdown cases that are reviewed by nursing peer review committees and determined to be a minor incident as outlined in *Texas Administrative Code Rule 217.16, Reporting of Minor Incidents,* thus deeming the case not reportable to the Board.

The Texas instrument mirrors the national instrument by identifying nurse, patient, system, and healthcare team factors involved in the error event. The items were reviewed to ensure appropriateness for the Texas population. In addition to the items found in the NCSBN instrument, the Texas instrument also captures remediation strategies for both the nurse and the institution. The NCSBN TERCAP© Protocol was modified for the Texas TERCAP Pilot and provides detailed instructions and examples for each item in the instrument. Dr. Elizabeth Zhong, with the NCSBN, has provided consultation and support during the pilot.

The Texas TERCAP instrument was piloted by a workgroup comprised of nursing leaders in Texas hospitals and found to be user-friendly and understandable.

Sample Size and Statistical Power

The final study sample size of 191 usable events was encouraging and reflective of the efforts put forth by the study team members to engage the participants in the process. Although the power analysis was strengthened by this increase in usable events (see following explanatory paragraphs), it did not allow for the power level needed to reach the targeted 260 usable events. A continued increase in event counts will soon allow for sufficient power of analysis.

The *power* of a statistical test is the probability that the test will demonstrate a difference, when in fact, a difference truly exists.[1] For example, is there a difference in the location of the hospital being rural or urban (two category levels) and the number of error events reported? To answer that statistical question with 80% power, a minimum of 155 events should be included in the analysis. With the final sample count of 191 events, the power analysis for two-category level statistical question yields a power of 88.1 %. So one would be 88% confident that differences in two-category level research questions, is in fact *true,* which is above the standard of 80%.

At the other extreme, is there a difference in the length of time a nurse works in a patient care area (five category levels) and the number of error events reported? To answer that statistical question with 80% power, 260 events should be included in the analysis. The pilot should have a minimum of 260 events so that the more complex questions (five category levels) can be answered with 80% power confidence. With the final sample count of 191 events, the power analysis for five-category level research question yields a power of 63.7%. So there is almost 64% power confidence the differences in five category level research questions is in fact true, which is below the standard of 80%.

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[1] Source: Post hoc power analysis* was conducted using *G*Power Analysis* software available at http://www.psycho.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register

Communication, Support and Feedback

Several initiatives have been implemented since the beginning of the pilot to provide ongoing communication and feedback between the Board and pilot participants. For example, in May 2013, a survey was sent to all participants soliciting their input and comments about the project. In June, 2013 an information sharing Webinar was conducted to provide clarification about reporting requirements, consistency in data entry, and early data trends. Seventy-three participants attended this training.

During the months of October 15 – December 15, 2013, a free Board Webinar on *Rule 217.19, Incident-Based Peer Review,* was offered to the peer review committees of participating institutions. Upon further communication, some participants were unable to attend the webinar during this time frame; therefore, it was made available as needed.

A mid-pilot report was presented at the January 2014 Board meeting and also shared with the participants. In June 2014, a Webinar providing data updates and emerging themes was attended by 56 participants. After the Webinar, a conference call opportunity was offered to participants for questions or comments concerning the pilot.

In an effort to ascertain detailed information and feedback from participants, approximately 40 phone calls were made by staff to individual hospitals. In addition, some participants initiated contact with the Board regarding questions about the pilot.

Since the pilot's inception, ongoing communication with the participants has been a priority. Several e-mail notifications have been distributed providing updates and other important information aimed at encouraging ongoing participation.

General Results and Demographics

This report is based on the results of 191 events collected from three rural and 32 urban-based acute care facilities/hospitals between September 1, 2012 and September 30, 2014. Key findings of interest are provided.

The present report contains 195 events (see Table 1), of which 191 events are from acute care facilities, two are from behavioral health facilities, one from an assisted living facility, and one from an ambulatory care facility. The analysis for this report is comprised of the 191 hospital-based events from 35 hospitals.

Facility Type

Table 1: Type of Facility

Question 2. Type of facility or environment (select ONLY one)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ambulatory Care	1	.4	.5	.5
	Assisted Living	1	.4	.5	1.0
	Behavioral Health	2	.9	1.0	2.1
	Hospital	191	83.0	97.9	100.0
	Total	195	84.8	100.0	
Missing	System	35	15.2		
	Total	230	100.0		

Metro (Urban) Compared to Non-Metro (Rural) Status

The classification of metro and non-metro was based upon the definition provided by the Healthcare Resources and Services Administration (HRSA) department. HRSA classifies a county as urban if it is in one of the 381 Metropolitan Statistical Areas (MSAs) delineated by the federal Office of Management and Budget (OMB)**.** [2] In other words, all counties that are not part of a Metropolitan Statistical Area (MSA) are considered rural**.**

The United States Office of Management and Budget (OMB) has defined 381 Metropolitan Statistical Areas (MSAs) for the United States and seven for Puerto Rico. The OMB defines a Metropolitan Statistical Area as one or more adjacent counties or county equivalents that have at least one urban core area of at least 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.[3]

Texas contains 25 MSAs as designated by the OMB 2010. As noted, three of the 35 hospitals included in this report were rural-based. See Figure 1.

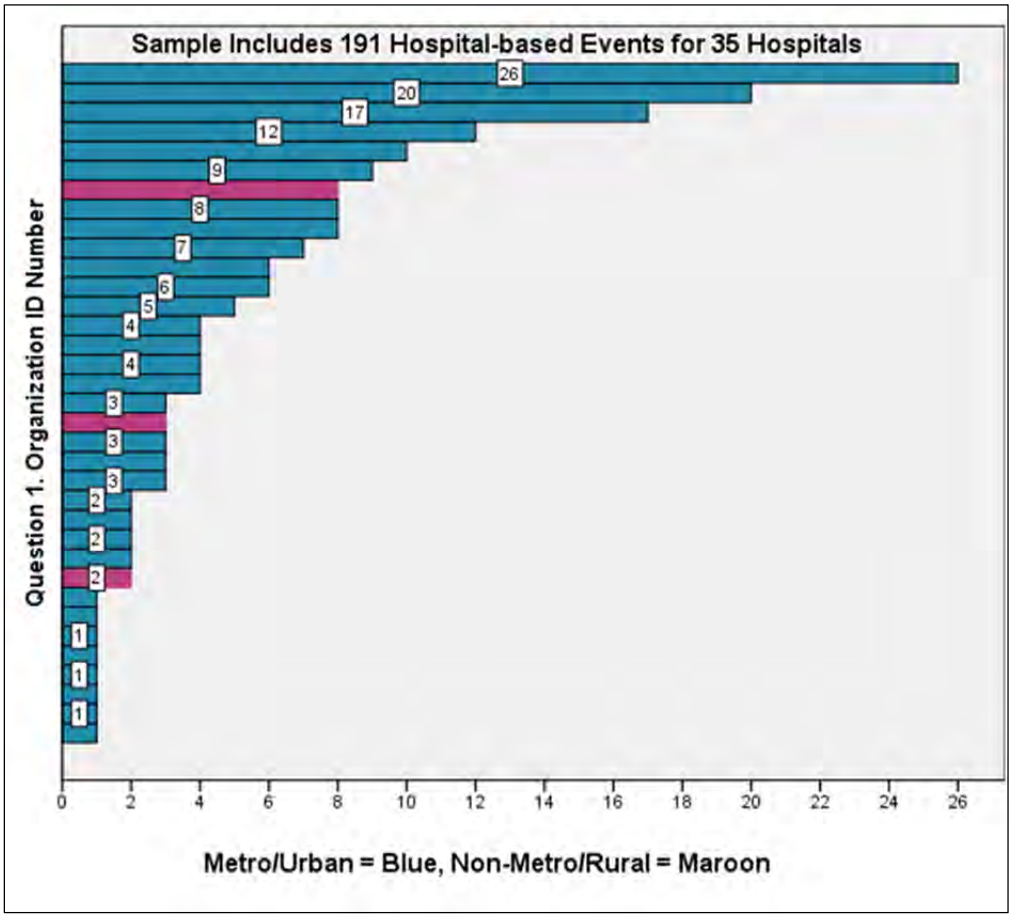

Figure 1

[2] All counties that are not part of a Metropolitan Statistical Area (MSA) are considered rural. Source: HRSA Defining Rural Population. Retrieved from http://www.hrsa.gov/ruralhealth/policy/definition_of_rural.html

[3] Source: http://en.wikipedia.org/wiki/List_of_Metropolitan_Statistical_Areas

Distribution of Hospital Based Events by Bed Size Category

Of the 191 hospital based events, the 351 – 599 bed size category comprised the majority of submissions. See Figure 2.

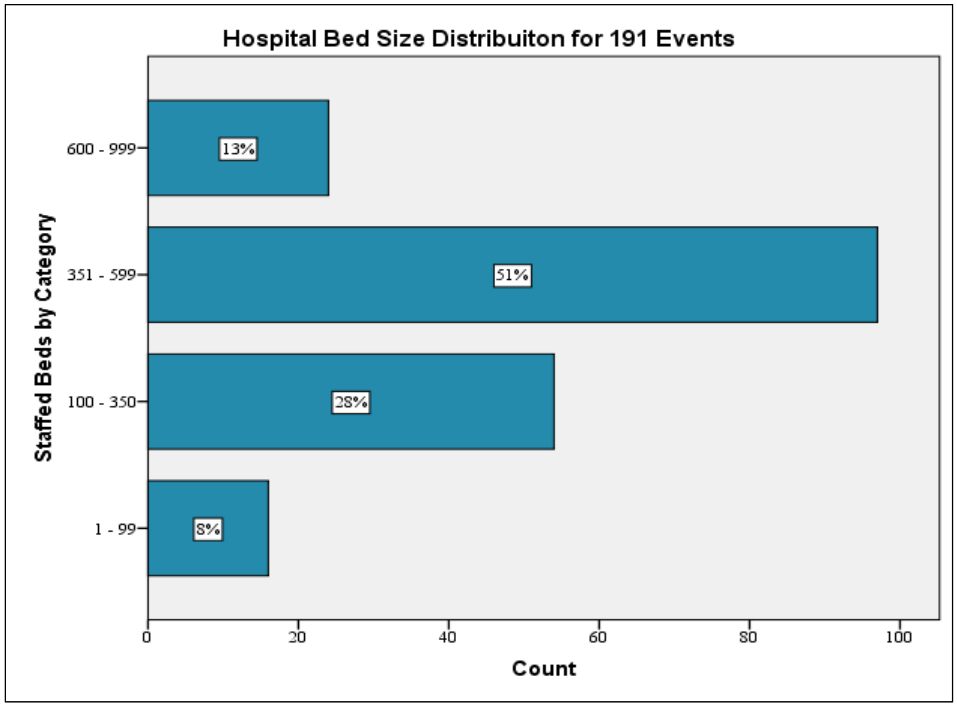

Figure 2

Distribution of the Number of Events per Quarter:

As noted in Figure 2(A), the number of events entered into the online data ranged from 15 to 32 events per quarter.

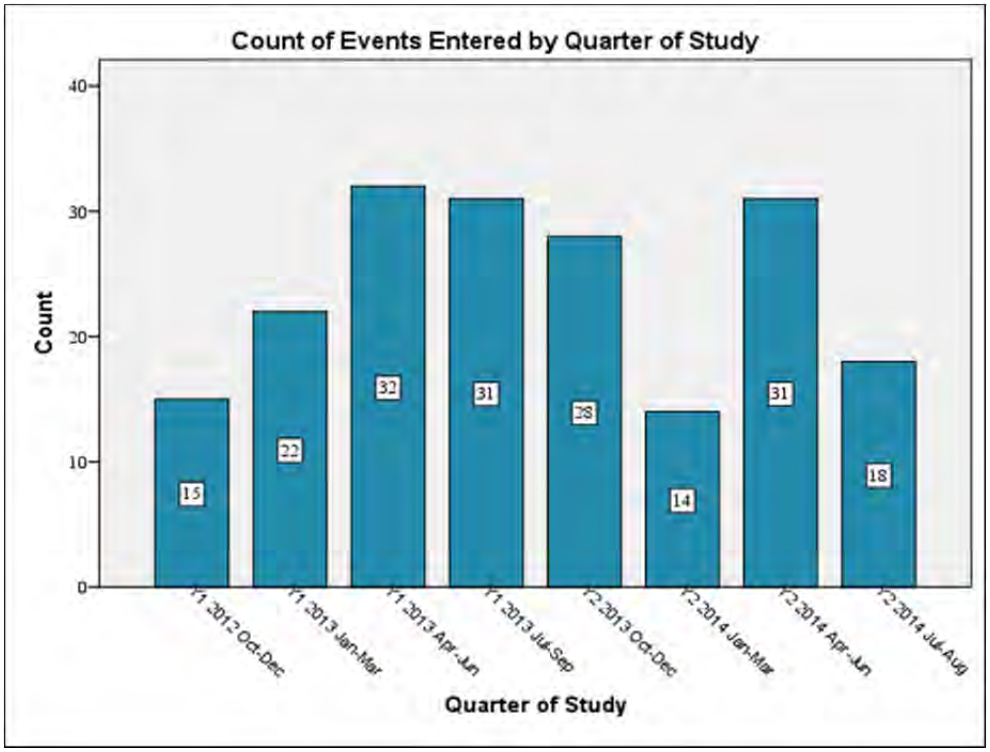

Figure 2 (A)

Year of Nurse's Initial Licensure: Hospital based events outlined in Figure 3 tended to be more frequently associated with nurses who received their initial license between 2000 and 2009. However, this finding may simply reflect the licensure status of the current Texas nursing workforce.

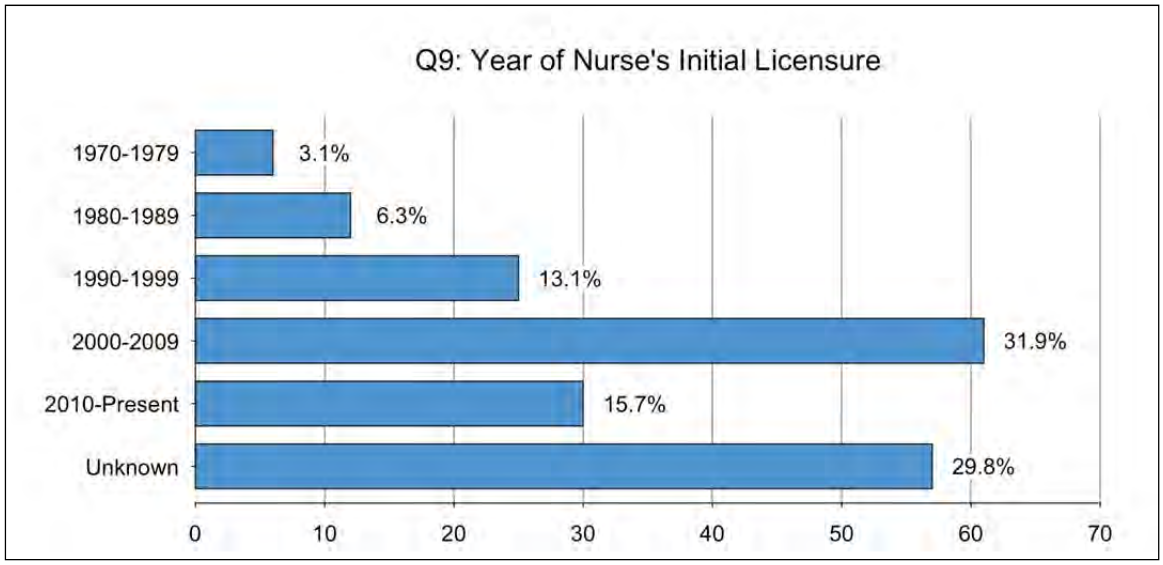

Figure 3

Professional Work History

Length of time in Patient Care Area: Figure 4 reflects that the majority of the nurses had worked in the location/unit/department where the practice breakdown occurred for more than five years.

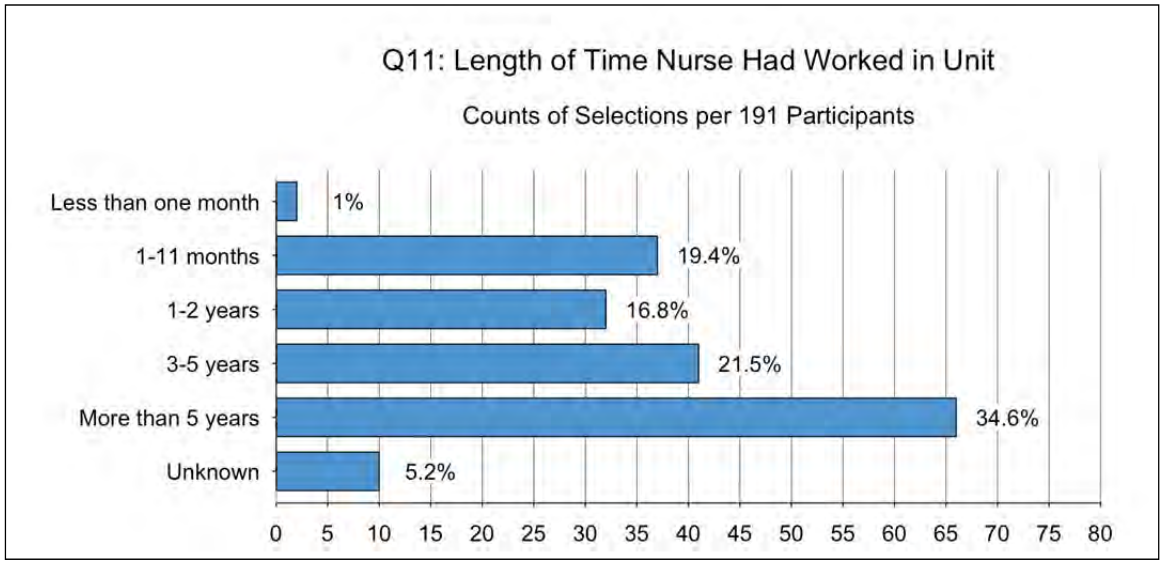

Figure 4

Working in a Temporary Capacity: Eighty-six percent of the cases did not involve a nurse working in a temporary capacity. See Figure 5.

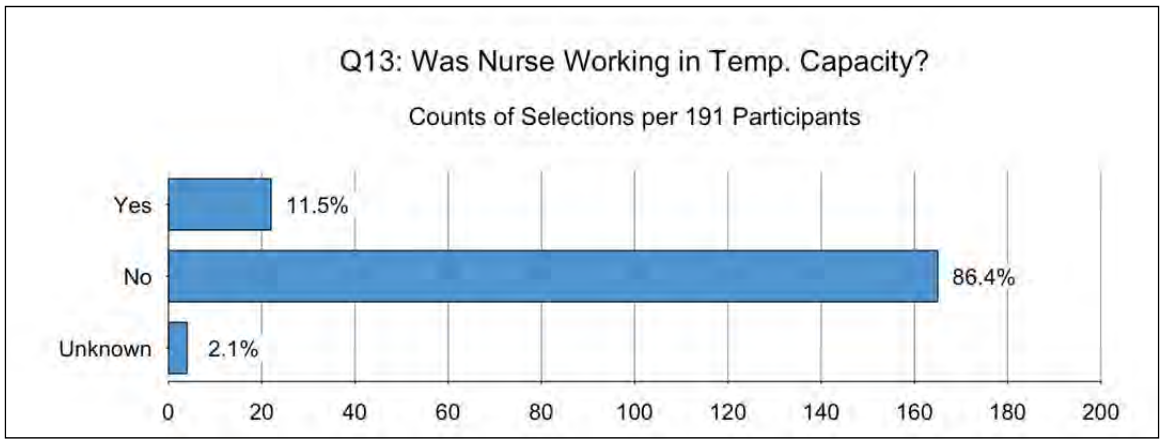

Figure 5

History of Practice Breakdown: Figure 6 reflects that the overwhelming majority (72.8%) did not have a history of practice breakdown.

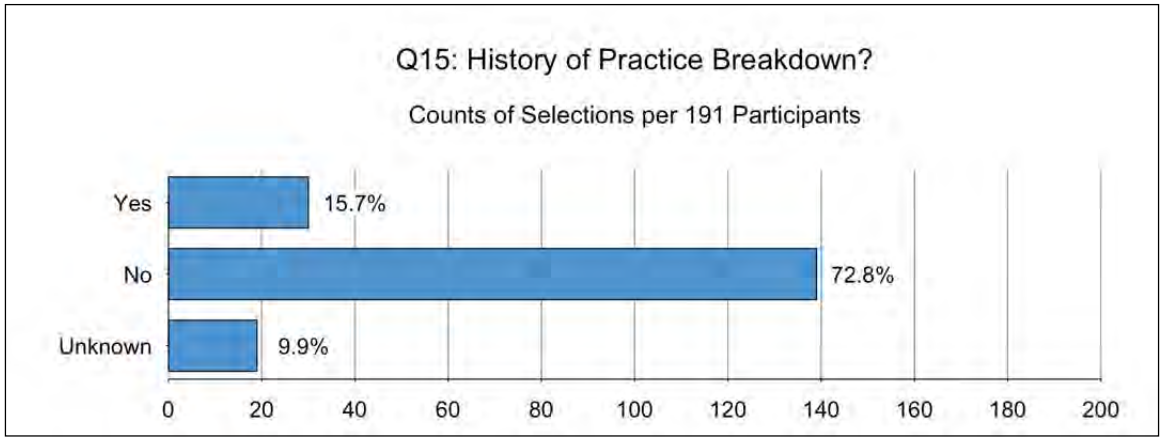

Figure 6

Employment Outcome as a Result of the Practice Breakdown: Figure 7 reflects that in 92% of the cases, the employer retained the nurse who was involved in the practice breakdown.

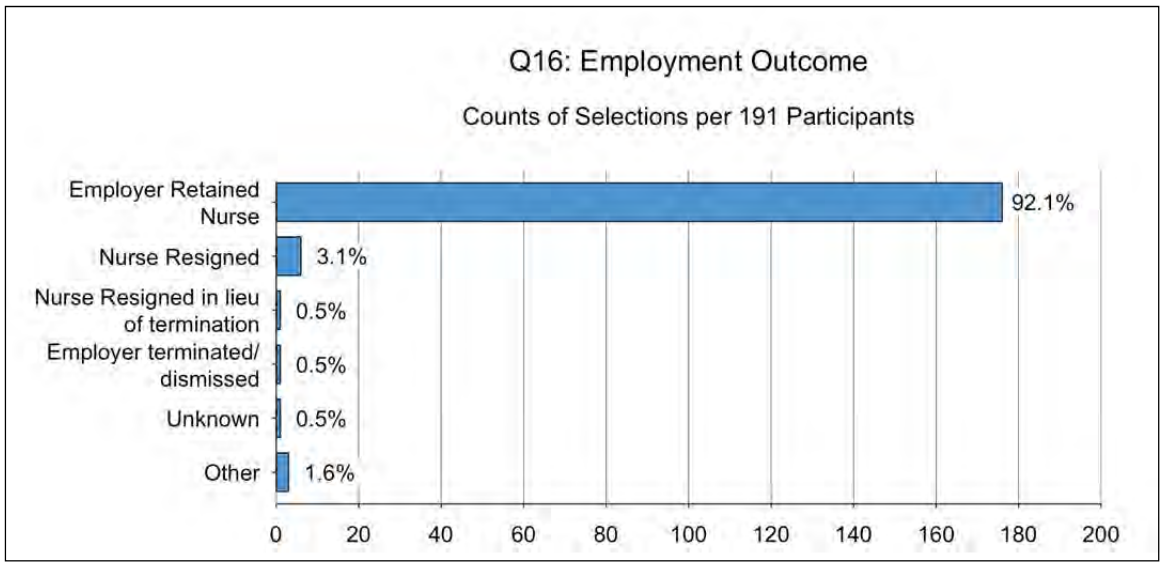

Figure 7

System Factor Trends

System Factors that Contributed to the Practice Breakdown: Figure 8 is a compilation of the major categories of the types of System Factors. There are several subcategories under each of the broad categories that provide more specific examples of the broad category. For the purposes of this report, only the broad categories are detailed to provide an overall picture of the responses. Communication System Factors were cited most frequently.

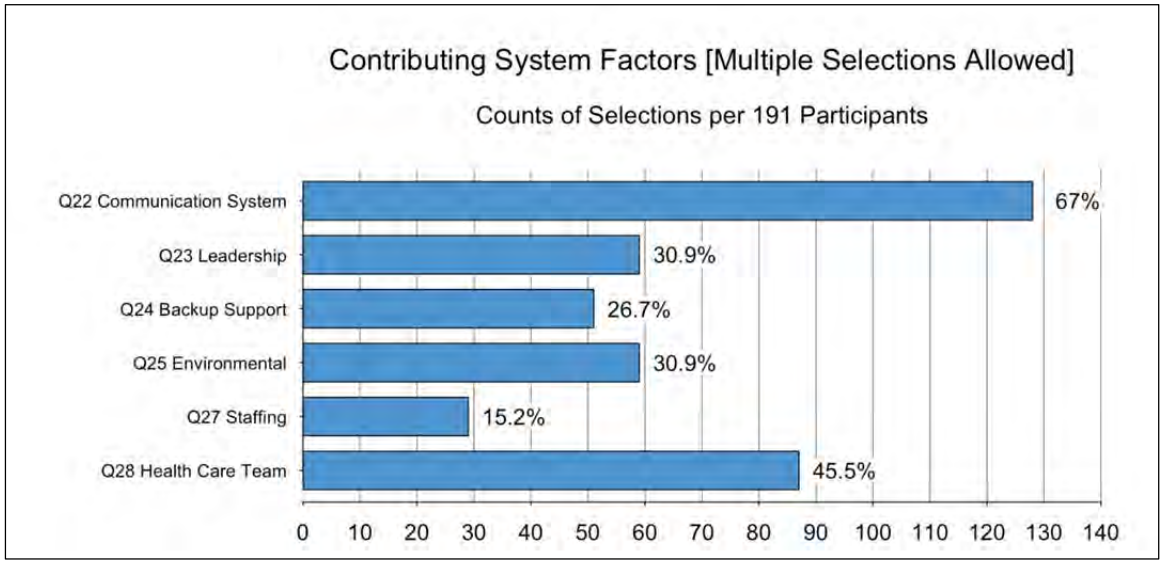

Figure 8

Other HC team members involved in the practice breakdown: Figure 9 reflects other team members who also contributed to the practice breakdown. Other staff nurses were most frequently cited.

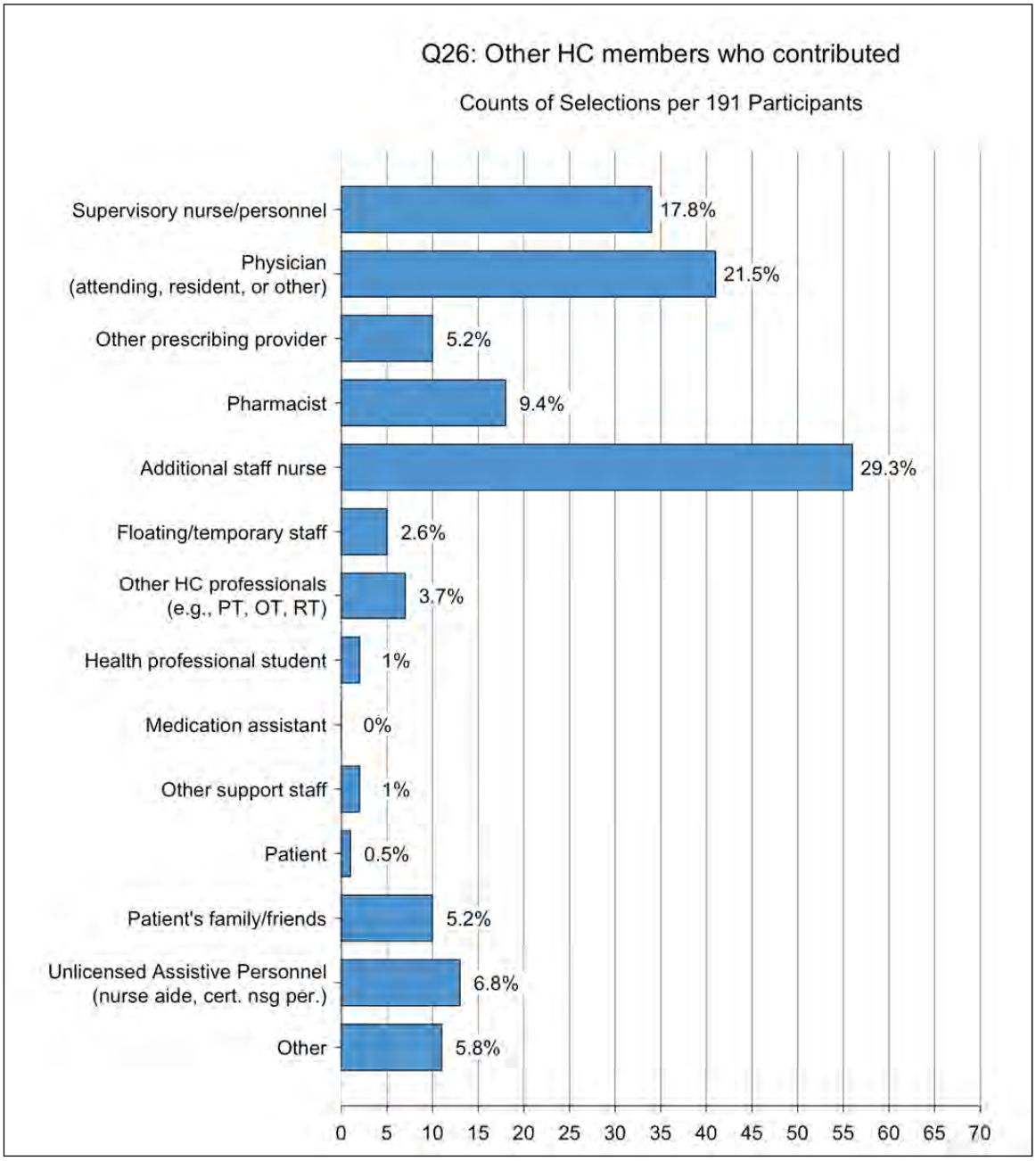

Figure 9

Intentional Misconduct

Intentional Misconduct: Approximately 10% of the cases were reported as intentional misconduct as reflected in Fig. 10. However, issues with documentation emerged as an aspect of the conduct in many of the cases and the comments did not reflect whether or not these events were intentional.

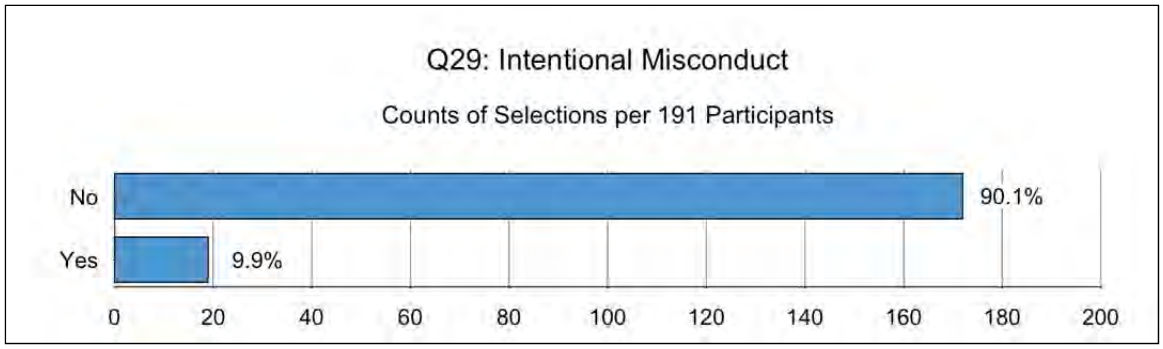

Figure 10

Intentional misconduct factors included (N = 19):

Four incidents involving intentional misconduct factors but not specified
Three incidents involving *Change/Falsified Charting*
Two incidents involving *Covering up an error*
Three incidents involving *Unknown*
Seven incidents described in the "Other" category including:

1. documented and initiated physician order-scope of practice;
2. no order, no documentation;
3. no order, no documentation;
4. no order; no documentation;
5. nurse chose to administer medication without IV pump;
6. nurse chose to administer medication without pump; and
7. RN knew she was not following policy and procedure.

Practice Breakdown Trends

Medication Errors: Figure 11 indicates that approximately 40% of the practice breakdown cases involved medication errors. Nurses frequently administer medications and are involved anywhere in the process from initial order, to filling the order, to administration to the patient.

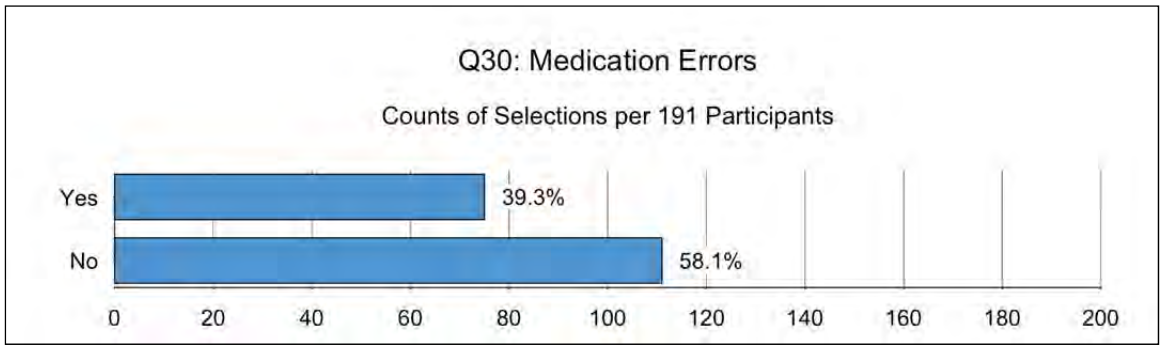

Figure 11

Documentation Errors: Approximately half of the events included a documentation error. See Figure 12.

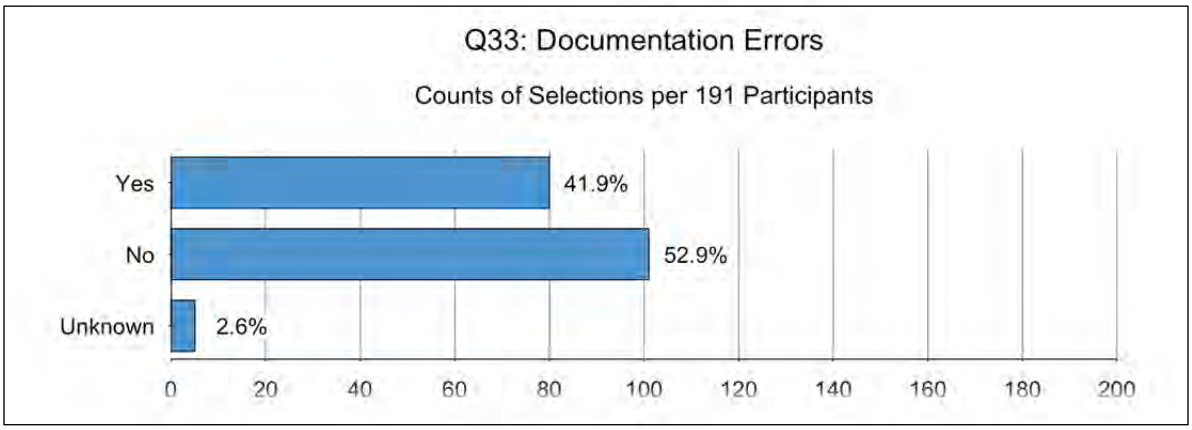

Figure 12

Type of Documentation Errors: Figure 13 indicates that the most frequent type of documentation error involved "incomplete or a lack of charting".

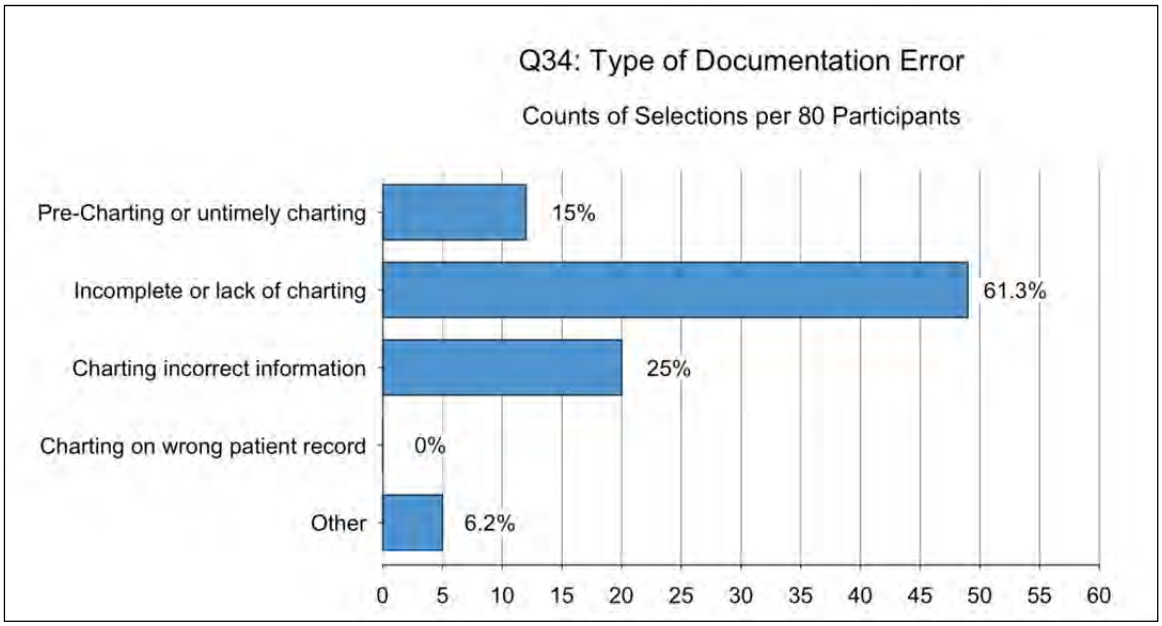

Figure 13

Documentation Errors Leading to the Practice Breakdown: Of the documentation errors involved in the practice breakdown, Figure14 reflects that 35% actually led to the practice breakdown.

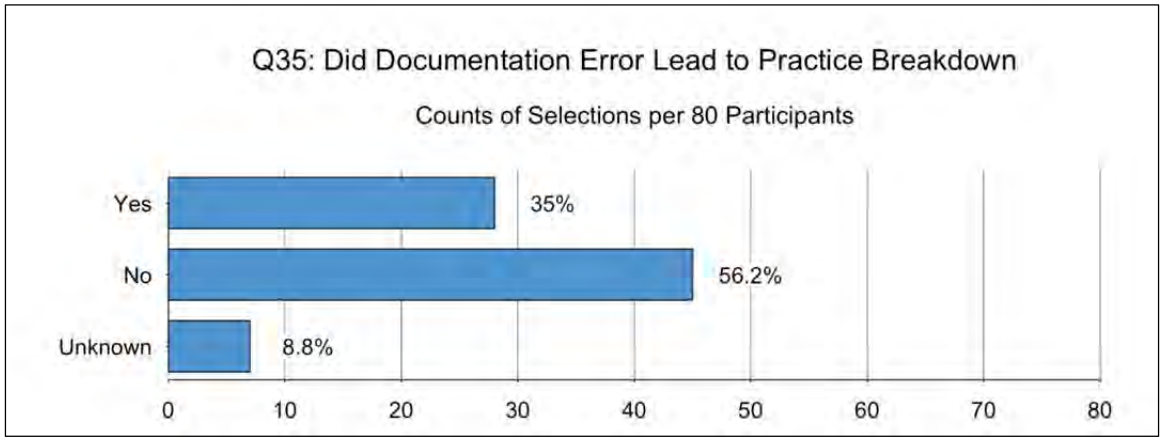

Figure 14

Most Significant Practice Breakdowns: Participants were asked to choose which practice breakdown category was the most primary or significant in representing the root cause of the event. Figure 15 reflects that Clinical Reasoning had the highest counts for the most significant practice breakdown.

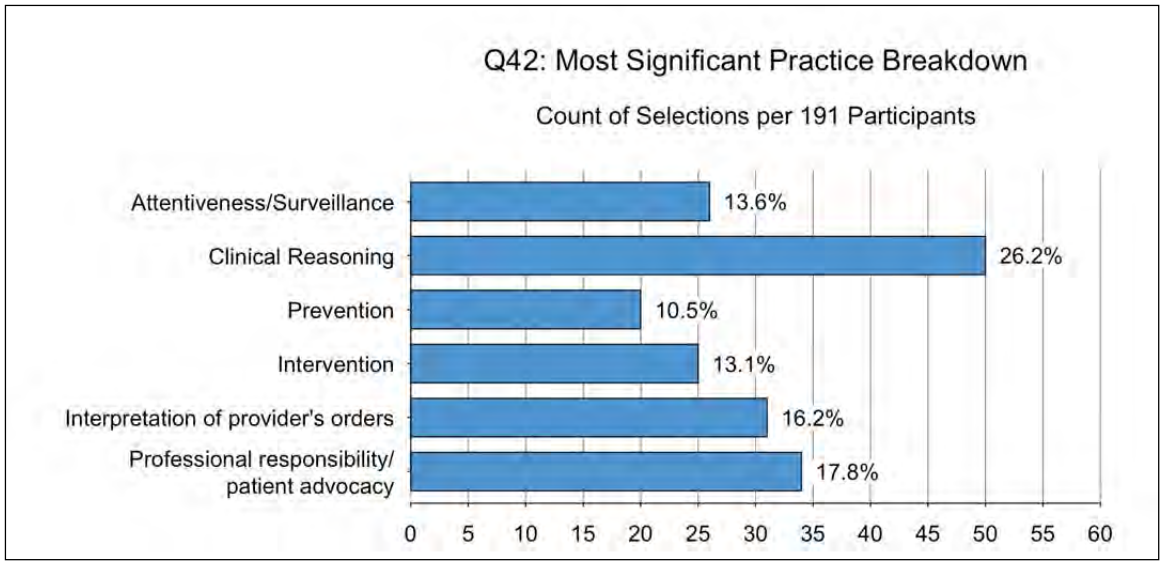

Figure 15

Practice Breakdown Frequency Counts: Figure 15 above asked participants to choose the most significant practice breakdown category that led to the event. Figure 16 below is the actual count of the number of times the practice breakdown categories were selected with multiple selections allowed. It is interesting to note that Clinical Reasoning was the most frequently selected and mirrors that finding in Figure 15.

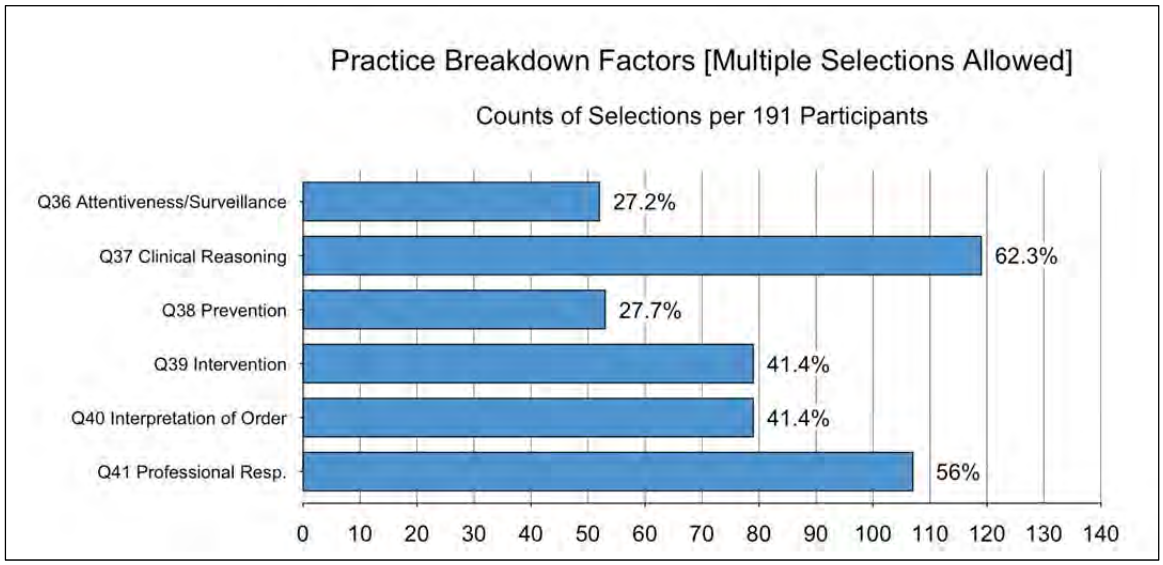

Figure 16

Outcome of Peer Review

Employer Remediation for the Nurse: Outcomes of peer review for the nurse reflect that the far most common remediation activity was done through internal training such as “in house classes, reorientation, or one-on-one training”. See Figure 17.

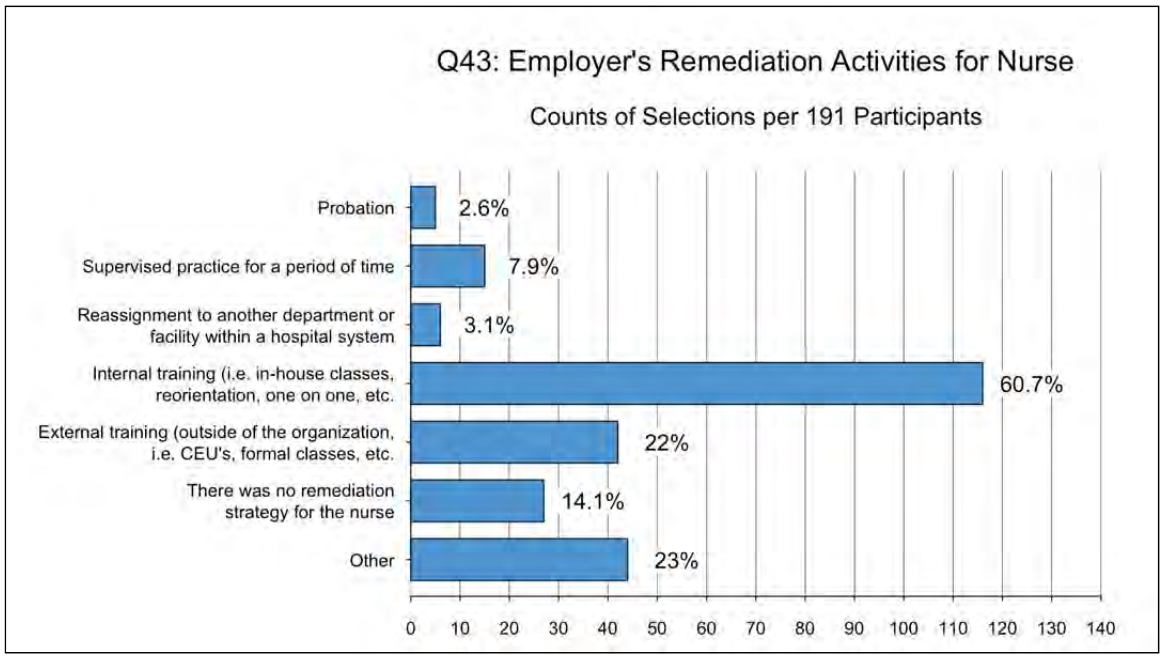

Figure 17

Summary of Key Findings

A. Online Data Report Reflected in the Graphs

Demographics, Professional Work History

Figure 4 reflects the length of time the nurses had worked in the patient care location where the practice breakdown occurred. Of note is that 35% were seasoned nurses who had worked on the patient care unit for over five years. **Figures 5** and **6** reflect that the overwhelming majority of nurses involved in the practice breakdown were not working in a temporary capacity nor did they have a history or pattern of practice breakdown. These findings mirror data collected by NCSBN through the national TERCAP© Project. **Figure 7** indicates that in 92% of the cases, employers did not terminate employment of the nurse for the practice breakdown incident and **Figure 17** reflects that 86% provided remediation for the nurse. As the pilot was created to collect incidents that do not reach the level of being reported to the Texas Board of Nursing, it seems likely that the employer would retain the nurse and work towards remediation of any practice issues.

System Factor Trends

Figure 8 reflects the system factors that impacted the practice breakdown event. Communication System Factors within the institution were the most frequently selected, followed by factors associated with the Health Care Team. As noted in the *Sample Size and Statistical Power Section*, an increase in the number of cases will lead to a more robust analysis of the systems contribution to the practice breakdown. **Figure 9** reflects other healthcare team members besides the nurse that contributed to the practice breakdown. The most frequently listed were *Additional Staff Nurse, Supervisory Nurses/Personnel* and *Physicians (attending, resident or other)*. These results reflect the importance of team work and professional communication.

Intentional Misconduct Subject to Reporting

The science of patient safety and the Just Culture approach strives for a culture that balances the need for a non-punitive learning environment with the equally important need to hold persons accountable for their actions. In a Just Culture there is a distinction between errors that are human in nature versus at risk or intentionally reckless behaviors in that it does not tolerate conscious disregard for risks to patients or gross misconduct. Just Culture continues to be a prominent theme in nursing regulation. Although a serious violation of the unprofessional conduct rule must be reported to the Board, this item was included in the TERCAP instrument to distinguish *intentional* behaviors that lead to error events from *unintentional* errors. **Figure 10** reflects that 90% of the cases were solely practice breakdown without misconduct or criminal cases. Of the 10% that did involve misconduct, half of them were considered “other” and written comments were included. However, the comments reflected issues with documentation and did not reflect whether or not these events were intentional.

Practice Breakdown Trends

Figure 12 reflects that 61% of the documentation errors involved “incomplete or lack of charting”. This issue is common in practice breakdown cases that are reported to the Board and also appears to be a problem with minor incidents. Also of interest in **Figure 13** is that almost half of the documentation errors led to the nursing practice error. Information about use of electronic health records is not captured; however, one wonders if the electronic health record may play a role in this trend.

Figure 15 outlines categories of practice breakdown. The participants were asked to select the one category that they believed was *most significant or primary* to the error event. As shown, *Clinical Reasoning* was selected most frequently while the selections of other practice breakdown categories were more evenly distributed. The importance of clinical reasoning and

its impact on nursing practice is an area replete with investigative opportunities. **Figure 16** reflects the broad categories that were selected *as a component* of the practice breakdown. Of interest is that Clinical Reasoning was selected as the most significant practice breakdown category as well as the most frequently selected category that was a component of the practice breakdown.

Outcome of Peer Review

Figure 17 reflects that employers implemented remediation activities for their nurses in 86% of the practice breakdown incidents. The majority of these remedial activities involved internal training or classes for the nurse.

Level of Harm

The item that solicits information about the level of harm resulting from the practice breakdown allows the user to select one of four levels of harm including *No Harm, Harm, Significant Harm,* and *Death*. Several cases were entered as having resulted in or contributed to significant harm or death of a patient which is Board reportable conduct and, as such, not appropriate for inclusion in the pilot. Upon investigation, it became apparent that the wording in this item may not have provided clarity in all of the selection criteria. The issue revolved around the lack of distinction in the question whether the level of harm was an outcome of the practice breakdown. For example, *Significant Harm* simply provides a definition and does not describe if that level of harm was a result of the practice breakdown. *Patient Death* reiterates that the practice breakdown "may have contributed to or resulted in patient death." See table below:

Question 21 Patient Harm (Select Only One)

No Harm: An error occurred with no harm to the patient
Harm: An error occurred which caused a minor negative change in the patient's condition
Significant Harm: Involves serious physical or psychological injury. Serious injury specifically includes loss of function or limb
Patient Death: An error occurred that may have contributed to or resulted in patient death.

In addition, the TERCAP Protocol, which has detailed instructions on how to complete the instrument and gives examples of the different levels of harm, does not provide direction on making the distinction that the practice breakdown did contribute to the patient outcome.

When reviewing the frequencies from this item, validity of the data is questionable because of the lack of clarity in how the question is worded. Of the 191 cases entered into the TERCAP Online Database, it was noted that 111 (58%) resulted in no harm, while 53 (28%) resulted in harm that caused a minor negative change in the patient's condition. It was reported that there were 12 (6%) cases of significant harm and 15 cases (8%) that may have contributed to or resulted in patient death. In subsequent discussions with participants who had entered *Significant Harm* or *Death*, it was ascertained that sixteen (16) of these cases *did not* contribute to significant harm or death of a patient but were the final outcome of the patient's condition. Additionally, participants reported that two (2) cases were mistakenly entered into the TERCAP online data base because they were also reported to the Board's Investigations Department. One participant had a different institutional definition of significant harm so the case as was assigned as *Significant Harm* when the TERCAP protocol outlined it as *Harm*. The subsequent cases of "significant harm" or "death" appear to be from lack of knowledge about the TERCAP Pilot Program's inclusion criteria and a lack of knowledge of the Board's reporting requirements. As stated, staff have serious doubts about the accuracy of these frequencies.

(Also See Section *Summary of Key Findings, B. Other Findings*, *Board's Reportable Conduct Rules*)

B. Other Findings of the Pilot

Participation in the Pilot

During this two year pilot program the number of cases has steadily increased from 99 cases in the first year of the pilot to 191 cases at the end of the pilot in August 2014. The number of participating hospitals also increased from 30 during the first year of the pilot to 35. These increases may have been due to the pilot participants becoming more knowledgeable about the pilot and aware of the importance of data entry. Additionally, the January 2014 Mid-Pilot Report reflected the need for more data in order to conduct an extensive analysis of the practice breakdown events and provided information that may have increased the interests of the participants. Lastly, participants may have become more aware of the requirements in the Board's Peer Review Rules with a subsequent increase in the number of peer review hearings.

Thirty-five out of 92 hospitals who had contracted to participate in the pilot, actually entered cases into the online data base. There were several reasons given for lack of participation in the pilot. Some hospitals indicated there was no need to conduct peer review cases. One participant indicated that their hospital system had implemented a quality improvement program that was very proactive and had eliminated the need for peer review hearings. Some participants indicated that all of their peer review cases had been reported to the Board and were not appropriate for the pilot. Some participants indicated that the incident was reported to the Risk Management or Quality Improvement Departments and did not go through the peer review process. Individuals in this particular group indicated that they had realized the issue with this process and had, subsequently, ensured that there was a person or a mechanism in place during quality or risk management reviews to evaluate if the Board's peer review requirements were also being met.

Ongoing Communication

Feedback from participating organizations has been overwhelmingly positive. In a survey of participants, 80% indicated they were satisfied with the project and of this percentage, 57% were very satisfied. Ninety percent also indicated that the pilot had helped or had the potential to help with the resolution and mitigation of practice breakdown. This positive response was also reflected through ongoing conversations with the participants. Common statements included: "love the instrument"; "provides structure and supports the evaluation of practice breakdown"; and "promotes open discussion of practice breakdown." One observer said that with the implementation of the Texas TERCAP Pilot, there was much more discussion and activity around nursing practice breakdown and "allowed for consistency and transparency" in the peer review process.

This pilot also has provided a mechanism for participating organizations to receive Board resources that promote patient safety including:

- webinars;
- material for educating nurses about the Board's rules and regulations to promote patient safety;
- consultation from Board staff regarding the pilot and other Board information;
- Board reports; and
- data reports.

Peer Review Processes

Cases that were appropriate for the Pilot were those cases reviewed by a peer review committee and deemed not reportable to the Board. Consequently, participation in the pilot was very dependent on existing peer review processes. These processes varied by hospital with some of the large multi-hospital organizations being very standardized and systematic in their peer review approach while some large systems delegated the process to individual hospitals.

Not surprisingly, it was common that the key position for responsibility of the pilot was the same individual that monitored and implemented peer review processes in the organization. Many

participants indicated that there was turnover in staff responsible for their peer review processes. For example, they had lost the chair of their peer review committee or they had ongoing turnover in peer review chairs. Their discussion reflected that this turnover may have contributed to a lack of participation in the pilot and possibly peer review. The lack of a well-established and tenured chair appeared to impact the functionality of the peer review process.

Many participants indicated that the pilot had strengthened their peer review processes. Several indicated they used the TERCAP instrument for fact finding and investigations. Some participants used the instrument during the peer review hearing with committee members utilizing the instrument to evaluate the case. One participant indicated that their peer review committee had changed from an ad hoc committee that only met to evaluate individual nursing practice to one where current committee members were well trained, met regularly to discuss quality issues related to nursing practice, and focused on prevention and not just the review of practice breakdown.

Board Reportable Conduct Rules

During the first phase of the pilot, staff were surprised by the inclusion of several practice breakdown cases that had contributed to the significant harm or death of a patient. These types of practice breakdown events are required through *Texas Occupation Code* 301.401(1)(A) and the *Texas Administrative Code* 217.16 (d)(1)(A) to be reported to the Board and were not appropriate for inclusion in the pilot. Language in the *Pilot Participation Contract*, in the initial and ongoing training initiatives and in the online instrument clearly stated that the peer review committee must have made the determination that any practice breakdown entered into the online data bases had been deemed not reportable to the Board.

As outlined in *Summary of Key Findings A. Online Data Report Reflected in the Graphs - Level of Harm* of this report, related to the reliability of the item concerning the level of harm as a result of the practice breakdown, there was a lack of clarity in the item and participants were briefed about the issue and given clear instructions on how to discern the question. This was done through an electronic communication with the participants and in a statewide Webinar. During the Webinar, case studies were reviewed demonstrating application of the criteria for inclusion or exclusion in the pilot. It was emphasized that those practice breakdown incidents determined to have contributed to death or significant harm to a patient should be reported to the Board and were inappropriate for the pilot.

As the pilot progressed, reports of practice breakdown that contributed to significant harm or death continued to be entered into the data base and it was determined that an in-depth review of those cases needed to be conducted in order to gain more clarity about this phenomena. Subsequently, staff made individual phone calls to the organizations who made these reports to ascertain the rationale for the case being entered into the pilot in lieu of the case being sent to the Board. As noted in *Summary of Key Findings A. Online Data Report Reflected in the Graphs - Level of Harm* of this report, when discussions took place about the details of the case, many participants clarified that the case/s they entered as *Significant Harm* or *Death* were not the direct result of the nurse's practice breakdown and should have been recorded as "harm" or "no harm". In addition to the issue with clarity of the item in the instrument, the following observations made during the phone calls with participants are outlined below.

- Some participants have a lack of knowledge of the Board's reporting requirements.
- One participant was very familiar with the Board's reporting requirements but misunderstood the intent of the rules.
- In addition to uncertainty about what practice breakdown cases should be reported to the Board, some participants also voiced an uncertainty about what should be reported to the peer review committee.
- Several participants indicated that there was under reporting in their institution.

- Some of the participants discussed the difficulty of determining if the practice breakdown actually contributed to the level of harm, particularly in very fragile patients.
- One participant did not report the nurse because another healthcare provider was involved in the practice breakdown so the responsibility did not lay solely with the nurse.
- There was turn-over in peer review personnel so some participants were not sure why the case wasn't reported to the Board.
- In one institution, the case was too old to determine the specifics of why the practice breakdown was included in the pilot.
- One participant indicated that nurses on the peer review committee put themselves in the nurse's shoes so they did not want to report the nurse to the Board.
- Some participants revealed that the nurse was "a good nurse" and shouldn't be reported to the Board.

These observations may reflect common issues found in nursing workplace environments such as: the complexity inherent in evaluating practice breakdown; organizational cultures that do not fully embrace the objective reporting and review of practice breakdown; not prioritizing the peer review process to ensure that appropriate training, oversight and evaluation is ongoing; and the lack of knowledge and training about the Board's Peer Review rules and mandatory reporting requirements. In addition, a report to the Board's Nursing Practice Advisory Committee about this finding lead to a discussion about the clarity or lack of clarity of Texas Administrative Code 217.16, *Reporting of Minor Incidents.*

Discussion and Recommendations

Besides being a new method for obtaining data about practice breakdown cases seen by peer review committees throughout the state of Texas, the Texas TERCAP Pilot Program has enabled ongoing communication between the Board and participating organizations about methods to promote patient safety. Through these communications Board staff learned how nursing peer review committees function and have discovered both issues and best practices that have been shared with other participants. The vast majority of pilot participants appeared to be strongly motivated to learn more about nursing practice breakdown for the purposes of promoting patient safety and complying with the Board's rules and regulations. Consequently, staff believe that the information shared through this pilot will support organizational changes to enhance not only individual nursing practice and but also patient care delivery systems. For instance, organizations should strive to ensure that there is a stable, fully functional peer review chair and committee. The peer review chair and committee members must be adequately trained to effectively evaluate practice breakdown as well as comply with the Boards rules and regulations. In addition, policies should be in place to ensure that when quality or risk management committees review nursing practice breakdown, the peer review committee should be notified if appropriate.

An item analysis should be conducted to promote the ongoing reliability and validity of the instrument. Most importantly, the language in the item that solicits information about the level of harm to the patient as a result of the practice breakdown should be discussed and thoroughly evaluated and possibly reworded to promote clarity. This item was developed at the national level for staff members of boards of nursing who receive extensive training about the evaluation of practice breakdown cases. Participants in the Texas pilot most likely do not have this level of expertise and so the language in the item should be much more comprehensive and precise. In addition, the item that solicits information about intentional misconduct should also be reviewed to determine if the question is clear enough about intent.

An important finding from this pilot is that there appears to be a generalized lack of understanding about the Board's reporting requirements for practice breakdown cases that contributed to significant harm or death of a patient. Consequently, staff have begun to implement strategies to address this issue. For instance, staff have conducted special

workshops around the state to promote an in depth understanding of the Board's reporting requirements and Peer Review Rules and Regulations. Additionally, staff have begun the development of an algorithm about reporting practice breakdown events to the Board to more clearly demonstrate the steps that should be taken to comply with the regulation. Following a report from the Nursing Practice Advisory Committee about a possible issue with the clarity of Texas Administrative Code 217.16, *Reporting of Minor Incidents*, the Board, in their July, 2014 meeting, issued a charge to the committee to review the rule for assurance that the reporting requirements are clear and comprehensible.

There is much work to do if the pilot is continued. Because of the limited number of cases and time constraints, there were several analyses that staff were not able to complete during this pilot. These include a review of all of the items in the instrument, why almost half of the documentation errors lead to a practice breakdown, the frequency of *Clinical Reasoning* responses and employer remediation strategies. In addition, the item concerning *Intentional Misconduct* should be reviewed to ensure clarity. There is also a need to increase the number of participating hospitals as well as increasing the number of cases in the online data base. As outlined in the *Sample Size and Statistical Power Section*, there should be at least 260 cases to answer more complex questions about the data. As of September 1, 2014, there are 191 cases so this goal is very achievable. It should be determined whether to more thoroughly solicit those hospitals who have not entered any cases, open enrollment to other hospitals not currently signed up for the pilot, or do both. One action that will be completed is to ascertain how many of the initial hospitals who signed up to participate in the pilot are going to do so in the future.

As noted, the pilot has been very beneficial for increasing communication between the Board and nurses who monitor and oversee nursing practice breakdown. To continue to enhance participation and discern potential policy implications, it is recommended that the pilot be continued for two more years to allow the Board ongoing evaluation and analysis.

Author Information

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Mary Beth Thomas is an independent consultant providing expertise and support to government and private entities pertaining to the complex issues in nursing regulation, administration and patient safety. In 2007, she received a PhD from the University of Texas at Austin School of Nursing where she was the co-recipient of the Outstanding Graduate Student Award for her doctoral work in investigating nursing practice errors. She worked for Texas Board of Nursing as the Director of Nursing Practice and Education from 2004 - 2012 where she provided leadership in championing patient safety and strengthening professional competency.

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Obtained a BS in Nursing in 1977. Completed a MS in Nursing in 1986 from Kansas University, Kansas City, Kansas. In 2002, was awarded a PhD from the College of Nursing, Texas Woman's University, Denton, Texas. Dissertation focused on the impact of managed care on healthcare delivery practices as perceived by administrators versus clinicians. Worked as Senior Manager, Center for Research and Innovation, VHA Inc., Irving, Texas.

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She has practiced direct patient care predominately on a cardiac telemetry floor in various roles including staff nurse, unit educator, and relief charge nurse. She was involved in various teams, committees, and was elected to leadership roles in the shared governance council. She was an adjunct faculty member for associate degree nursing students at Austin Community College for two years. In 2014 she was a member of the Bylaws Committee for the National Council of State Boards of Nursing.

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Kristin Benton has worked as the Director of Nursing with the Texas Board of Nursing since 2013. In 1993 she earned a Bachelor of Science degree in Psychology from the University of Florida, then a Bachelor of Science in Nursing from Louisiana State University Health Sciences Center School of Nursing in New Orleans, LA in 1996. She completed a Master of Science degree in Nursing from the University of Texas Health Science Center at San Antonio in 2005. She practiced direct patient care in several areas including medical-surgical, oncology, infectious disease, and emergency nursing. She taught vocational nursing at Austin Community College for 13 years and served on the Texas Board of Nursing from 2008-2012, serving as Board President from 2011-2012. During her Board term, she served four years on the National Council of State Boards of Nursing NCLEX-Item Review Panel subcommittee.