

REPORT OF THE EXECUTIVE DIRECTOR

NATIONAL ISSUES

Nursing Workforce Shortages: An April report from the Alliance for Health Reform addressed the causes and solutions related to the future supply and demand for health care providers. “Debates continue in policy circles among researchers on whether the shortages are due to insufficient numbers of providers, or maldistribution of those providers. Experts also debate over whether the solutions are to build more schools and enlarge classes to graduate more physicians, expand the number of residency slots, find incentives to attract providers to health professional shortage areas, or change the way we deliver care.” The report estimates that by 2025 the nursing shortage will near 260,000 RNs due to a “diminishing pipeline” of students, a decrease in earnings, high turnover and an aging population. One suggested solution is to heed the IOM recommendations and allow nurses to practice at the full extent of their education and training. http://www.allhealth.org/publications/Medicare/Health_Care_Workforce_104.pdf.

Delayed Retirement: A report by The Conference Board confirms that retirement is delayed most often by workers in the health care field. While this has staved off the looming provider shortage in the interim, as these workers retire, they are expected to leave a large provider gap in their wake. Leaders anticipate that nurse leadership will be most affected. Ideas for preventing a mass exodus of providers include role transitioning, flexible work hours, “four hour shifts, seasonal work, or teams that allow veteran nurses with years of experience to coordinate patient care.” The report in Health Leaders is titled *U.S. Workers Delaying Retirement: What Businesses Can Learn from the Trends of Who, Where and Why*. <http://www.healthleadersmedia.com/content/TEC-266573/Healthcare-Workers-Delaying-Retirement.html##>

National Health Care Workforce Commission: The Washington Post reported that the National Health Care Workforce Commission was established under federal health reform in an effort to address the nationwide shortage of health care providers and “analyze primary-care shortages and propose innovations for the government and medical schools to help produce the doctors and other health workers the nation needs.” When created, however, the commission was not given any funding and has, thus, been unable to begin working. The Commission’s chairman, Peter Buerhaus, RN, stated that without addressing workforce needs, health reform cannot be accomplished. http://www.washingtonpost.com/national/health/partisan-fights-in-congress-stall-panel-on-primary-health-care-shortage/2011/05/09/AFCKBW2G_story.html?hpid=z1

Access to Care: The Kaiser Commission on Medicaid and the Uninsured published a report from their December 2010 Health Reform Roundtables: Charting a Course Forward, in which they proposed solutions for ensuring access to care under health reform. In their report, they identify eight prevailing issues related to access to care and health reform. These issues include: growing the primary care workforce, fostering access to specialists and mental health

care, providing adequate payment to providers, expanding managed care, creating safety-net hospitals and health centers, encouraging team-based care and coordinating between Medicaid and insurance exchanges. The report recommended “removing state, federal, and health plan barriers that prevent nurse practitioners from practicing to the full extent of their education and training.” <http://www.kff.org/healthreform/upload/8187.pdf>

Health Policy Brief and Federal Patient Safety Initiatives: In April, the Robert Wood Johnson Foundation released a health policy brief titled, “Improving Quality and Safety.” In it, the brief discusses the on-going challenges to eliminating errors in care. It defines quality of care as “care that is safe, effective, patient-centered, timely, efficient, and equitable.” The brief refers to recent campaigns and their successes. These include, the Institute for Healthcare Improvement’s 100,000 Lives Campaign and Protecting 5 Million Lives from Harm initiative, the Michigan Regional Collaboration Improvement Program, Johns Hopkins University’s Comprehensive Unit-based Safety Program, and RWJF’s Aligning Forces for Quality Initiative. The brief also explains the error-reducing aims of the Affordable Care Act (ACA). One of these is the Partnership for Patients, “a national initiative aimed at reducing preventable, hospital-acquired conditions and complications that occur during patient transitions from one care setting to another.” The goal of this program is to reduce these complications by 40 percent by 2014.

Through the Partnership for Patients, the ACA invests \$1 billion toward eliminating hospital-acquired infections and readmission rates. As of late April, over 500 hospitals, providers, and companies pledged their support. Efforts will focus on reducing nine specific medical errors, including infections. The program will reward hospitals and providers for improved safety standards. Half of the \$1 billion is expected to be spent as grants to organizations that work toward better patient coordination upon discharge from the hospital. http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=45

Hospital Errors and Infection: A *Health Affairs* study out of the Institute for Healthcare Improvement found that one in three patients are harmed during a hospital stay. The study was conducted using a Global Trigger Tool method, which required nurses and pharmacists to review charts, looking for triggers that signaled an adverse event, and then further investigate to see if an error actually occurred. “In the 795 patient records they reviewed from three large tertiary care centers, the Global Trigger Tool detected 10 times as many adverse events as the Agency for Healthcare Research and Quality’s Patient Safety Indicators, which use billing data to spot events.” Of the errors found in the study, most were medication or infection related. The federal government published hospital-specific acquired conditions information. Data were gathered from Medicare bills submitted between from late 2008 to mid 2010. The review included the following safety concerns: falls, foreign objects left after surgery, catheter related infections, and bed sores.

A four year study of veteran’s hospitals showed a 62 percent decrease in the rate of MRSA infections in intensive care units and a 45 percent decrease in other hospital departments. “The Veterans Affairs strategy employs a ‘bundle’ of measures that include screening all patients with nasal swabs, isolation those who test positive for MRSA, requiring that staff treating those patients wear gloves and gowns and take other contact precautions and encouraging rigorous hand washing.” A similar study, however, questioned the necessity and cost effectiveness of testing every patient when it found that testing only those patients who present symptoms of infection was as effective as universal testing. The difference for the Veteran’s hospital is said to perhaps be linked to a culture change within the hospitals that required staff to have ownership in preventing the spread of germs.

http://www.nytimes.com/2011/04/14/health/14infections.html?_r=2

The Safe Injection Practice Coalition has called for greater attention on preventing unsafe injection practices. "In the last decade, more than 125,000 patients have been notified about potential exposure to infectious diseases such as hepatitis C due to reuse of syringes." To combat these unsafe practices, the coalition recommended that safe injection practices be taught to providers earlier in their education and that products be designed with better built-in safety measures.

http://www.premierinc.com/quality-safety/tools-services/safety/topics/safe_injection_practices/meeting.jsp

Health Literacy: According to new research published in the May issue of the *Journal of General Internal Medicine*, health illiteracy is a problem for many care givers. Of 98 Chicago area care givers questioned, results showed "more than a third of the people paid to care for seniors are not health literate, and 60 percent wrongly interpret the instructions on prescription labels." These poor results are attributed to a lack of regulation and training of care givers.

<http://www.ama-assn.org/amednews/2011/05/02/prsd0504.htm>

Learning from Allied Professions: Because many errors occur during patient handoffs, health care professionals are looking at allied professions for better strategies. Kaiser Permanente's vice president of Safety Management is a former Navy submariner. He is attempting to incorporate military handoff methods into the health care setting. Other organizations are using the "sterile cockpit" idea, which "requires that pilots refrain from nonessential activities during certain points during flight." And, doctors are using nurse handoff procedures as an example for their own practice. This information was published in *Doctors Could Learn Something about Medical Handoffs from the Navy*. Chicago Tribune, April 18, 2011.

Changes in School Health Services : CNN reports that as states face budget crunches, school nurse positions are more frequently being eliminated and replaced by school "health clerks" who may have no nursing knowledge or training. The National Association of School Nurses' statistics show that "only 45 percent the nation's public schools have a full-time on-site nurse. Thirty percent have one who works part time...and a full 25 percent have no nurse at all." Advocates for nurses in schools have pointed out that nurses are needed more than ever since more school-aged children face increasingly complex illnesses. "More than 300,000 school-aged children have epilepsy. About 4.5 million have ADHD. Some 15,000 kids learn they have Type 1 diabetes each year. Three million suffer from food allergies, and nine million have asthma." The report says that the burden for caring for these students has shifted to teachers and school clerical staff, taking time away from educating.

<http://www.cnn.com/2011/HEALTH/04/04/school.nurse.shortage.parenting/index.html>

Call for Increased Drug Oversight : The federal government has taken steps to raise the scrutiny of prescription painkillers, which has been deemed a public health crisis. The newly announced federal objective is to reduce prescription-drug abuse rates by 15 percent over the next five years. A public awareness campaign calls for states to track prescription drugs, the DEA to assist with disposal of unneeded drugs and greater education for prescribers. The FDA will now require manufacturers to offer educational products to thwart drug abuse. Continuing education credits will be available from the FDA to encourage providers to increase their understanding of prescription-drug abuse.

http://online.wsj.com/article/SB10001424052748703922504576272910965974714.html?mod=WSJ_hp_MIDDLENexttoWhatsNewsThird

Continuing Education: The Department of Health and Human Services' Agency for Healthcare Research and Quality (AHRQ) has published notice of a proposed project titled, "Comparative Effectiveness Research – Continuing Education." The study is being expanded to include nurses, nurse practitioners and other health care providers. "AHRQ wants to assess the impact continuing education has on clinician behavior, its perceived value, and whether or not education or comparative effectiveness research made a difference in a clinician's confidence in applying comparative effectiveness research in practice, understanding the application of such research, and improved ability to counsel patients on treatment and management alternatives." <http://www.gpo.gov/fdsys/pkg/FR-2011-05-25/html/2011-12668.htm>

STATE ISSUES

Fraudulent Schools of Nursing: Board staff have not received any new complaints of fraudulent nursing education programs operating in Texas. We continue to serve as a resource to other state agencies and boards of nursing. During last week's June 2011 NCSBN Education Conference Call, Board staff was able to share experiences with newly-hired education consultants in other states. In addition, Board staff anticipates appearing and testifying as an expert witness at the Office of the Attorney General (OAG) trial against Esther Medical Tutorial in Dallas, Texas. Proceedings against Esther's have been rescheduled several times due to internal OAG issues; however, we remain in communication with the OAG attorney assigned to the case.

Health Professions Council: The Health Professions Council (HPC) met on June 27, 2011 for its regular quarterly meeting. The Regulatory Data Base Project, which provides new licensure, discipline, and other data functions for four of the agencies went live the first week of June.

BOARD ISSUES

BON Bulletin Articles : The July issue of the *Board of Nursing Bulletin* contains a survey on RN knowledge of the laws and regulations affecting nursing practice in Texas. This survey is being conducted by Dorothy Otto and Edith Summerlin, faculty from UTHSC School of Nursing-Houston, and the Executive Director of the Texas Board of Nursing. A future survey will target LVN's knowledge of law and regulations. There are also articles on use of the credential "Doctor" by a nurse and Delegation vs. Assignment in nursing practice.

Board Development: At each board meeting, a board development session is held. Pursuant to discussions with the Board in January and with Richard Gibbs, Board Development Liaison, at this meeting a presentation will be given on Wednesday afternoon from 1 p.m. - 5 p.m. on the Anatomy of Board Investigation and SOAH proceedings.

AGENCY ISSUES

Executive Director Interviewed by Advance for Nurses: The interview was printed online June 14, 2011. You may link to the article at: <http://nursing.advanceweb.com/Archives/Article-Archives/On-the-Nursing-Watch.aspx> .

New Testing Center Opens in the Valley: A new NCLEX testing center is being opened by Pearson Vue in Harlingen, Texas. The “ribbon cutting” will be June 19, 2011 and Board members Kristin Benton, Richard Gibbs, and Tami Cowen and former Board member Rachel Gomez will be in attendance. Staff Katherine Thomas, Mark, Majek, and Mary Beth Thomas will also attend. An excerpt from the press release states: *“The new center represents several years in the making. The initiative started when NCSBN, in an effort to better serve U.S. nursing communities, surveyed its member boards of nursing to determine where there was need for a Pearson Professional Center to administer the National Council Licensure Examinations (NCLEX). The valley area of South Texas was identified as one of the most underserved areas. Over the last five years, this area has seen a steady increase in students graduating from the local nursing programs. So, in conjunction with Pearson VUE and the Texas Board of Nursing, NCSBN chose Harlingen, Texas, as the site for a new test center designed to serve the local community of nursing programs and students”.*

House Bill 3961 (81st Legislature): This bill passed in 2009 to create a study of certain nursing education programs that did not provide traditional clinical learning experiences. The Center for Nursing Workforce Studies issued an RFP but was not able to select a nurse researcher. NCSBN has also been interested in studying this issue. The HB 3961 Selection Committee has discussed a joint research project with NCSBN and has decided to meet with them in late August to determine if a research methodology and a researcher can be determined to be acceptable to both groups. If so, the needs of the State of Texas and the National Council could be served by working together.

Nursing Jurisprudence Examination: The Jurisprudence examination required for initial licensure by Texas Occupations Code Section 301.252, License Application, was implemented in September 2008. Access to the Board’s examination is available through the website, <http://www.bon.state.tx.us/olv/je.html>. Those applying for initial licensure by exam or endorsement **after** September 1, 2008 must pass the Jurisprudence Exam in order to be eligible for licensure. Attached are statistics for Jurisprudence exam takers for past fiscal years and through the third quarter of FY 11. **(See Attachment A).**

Staff received notice of an online posting of questions from our jurisprudence examination in mid June. Staff requested that the information be promptly removed from the website where it was posted and the host has removed this information. Staff are also exploring options to create greater security and will report to the Board when recommendations are final.

Website: The following changes/updates have been made to the Board’s website since the October Board meeting:

- Posted Adopted Rule Changes: Rule 217.4, relating to Requirements for Initial Licensure by Examination for Nurses Who Graduate from Nursing Education Programs Outside of United States' Jurisdiction and new section 213.33(m), relating to Factors Considered for Imposition of Penalties/Sanctions.
- Posted Proposed Rule Changes: New section 217.21, relating to Remedial Education Course Providers and Courses, and amended 223.1, relating to the Board's fees, Posted New Rules and Regulations (04/2011) booklet.
- Posted APRN Reference Information regarding “Obtaining a DEA Number” via the Texas Department of Public Safety.
- Posted Revision updates to Investigatory & Disciplinary Process Overview.
- Posted updates to Enforcement FAQ revisions.
- Posted updated Employer and Public complaint forms.

- Added Course Titles and Links to the BON's *Courses Approved to Meet BON Stipulations* Page for the National Council of State Boards of Nursing (NCSBN) Learning Extension and Texas Department of Aging and Disability Services.
- Posted Disciplinary Action Files and Board Order Links for action reported in the April 2011 newsletter.
- Updated the Web Expenditure Report for FY 2011-2nd quarter.
- Posted New Board Member information.
- Posted five (5) year NCLEX Passrate by School for RN and VN programs. .
- Posted updates to FAQ - Copying Nursing License FAQ.
- Posted Continuing Nursing Education brochure.
- Posted July 2011 Newsletter.
- Posted May, 2011 Presentation - Implementing the DEC's in Nursing Programs.

Website Audit: In early 2011, Concord Evaluation Group (CEG) assisted the National Council of State Boards of Nursing (NCSBN) in evaluating and enhancing a total of 62 board of nursing (BON) member and associate member websites. The intent of a review of BON websites was to provide constructive feedback on how to improve website transparency and ease of use for consumers. The Texas Board of Nursing participated in the audit of its website. The report concluded that “the Texas State Board of Nursing website (<http://www.bon.state.tx.us/>) to be a usable, visually appealing, and easy-to-navigate website....CEG found that the website effectively categorized a large amount of complex information in an intuitive information architecture” and CEG made four recommendations to improve usability. Staff will be making the recommended improvements. **(See Attachments B & C).**

Key Meetings and Presentations: attended/presented by the Executive Director and Staff since the last Board meeting. (Does not include internal meetings with staff) .

Executive Director meetings, conference calls, and presentations

Conference Call: Nurse Licensure Compact Administrators meeting, May 5, 2011.

Conference Call: with agency, legislative representatives and stakeholders of the State of Illinois to discuss the Nurse Licensure Compact, May 6, 2011.

Meeting: with Texas Nurse Practitioners Board of Directors, May 6, 2011, Austin.

Meeting: of National Council of State Boards of Nursing (NCSBN) Board of Directors, May 11-13, 2011, Chicago.

Conference Call: with CEO of NCSBN to discuss joint study of graduates of non-traditional nursing education programs pursuant to House Bill 3961 (81st Legislature), May 31, 2011.

Webinar: on Nurse Alert Feature of *NURSYS* to share investigative information with Boards of Nursing, June 1, 2011.

In-house Training at Texas Board of Nursing: Effective Communication Across Generations, June 2, 2011, Austin.

Meeting: Nurse Licensure Compact Coalition Meeting, June 7, 2011, Chicago.

Conference: Nurse Licensure Compact Seminar, June 8, 2011, Chicago.

Conference: Consumer Conference, June 9, 2011, Chicago.

Meeting: Texas Team Practice Council, June 10, 2011, Austin.

Meeting: with TPAPN representatives to discuss Substance Use Disorder Guideline Implementation, June 13, 2011.

Conference Call: NLCA Executive Committee meeting, June 13, 2011.

Conference Call: APRN Compact conference with special legal counsel to discuss changes to the model compact, June 14, 2011.

Conference: Executive Officer Seminar, June 21-22, Savannah, GA.

Conference Call: with NCSBN and Pearson Vue staff to discuss opening of the testing center in Harlingen, June 23, 2011.

Meeting: with stakeholders to discuss experience with implementation of House Bill 4353 (81st Legislature) regarding licensure of nurses from Mexico, June 24, 2011, Austin.

Meeting: Health Professions Council Quarterly Meeting, June 27, 2011, Austin.

Conference: CLEAR Second International Congress on Professional and Occupational Regulation, July 7-8, 2011, London.

Meeting: of National Council of State Boards of Nursing (NCSBN) Board of Directors, July 13-15, 2011, Chicago.

Ceremony: Opening of the new Pearson Vue testing center, July 19, 2011, Harlingen.

Director of Operations Meetings and Presentations:

Presentation: NCSBN Information Technology Summit, May 10, 2011, Denver.

Director of Nursing Meetings and Presentations:

Meeting: Texas Team Regional Action Coalition, May 6, Dallas

Meeting: Texas Department of Aging and Disability to discuss implementation of HB 1631, May 12, Austin

Training: *Implementing TERCAP for the Washington and Oregon Boards of Nursing*, June 14, Olympia Washington

Educational Consultants

Presentation: Spring Forum, *The Impact of Changes in Health Care on Nursing Education and Practice*, May 5, 2011, University of Houston-Victoria School of Nursing Sugar Land, Texas

Workshop: *Implementing the Differentiated Essential Competencies (DECs) in Nursing Programs*, May 26, 2011, Texas State University, Round Rock

Practice Consultants

Presentation: Brooke Army Medical Center - *Scope of Practice and Delegation*, April 26, San Antonio

Meeting: NCSBN APRN Committee and APRN Roundtable meeting, May 17 & May 18, Chicago

Meeting: TPAPN Advisory Committee, June 3, Austin

Meeting: Texas Department of Aging and Disability Task Force Meeting to discuss HB 1631, July 7, Austin Texas

Webinar: *Delegation/Scope of Practice* to East Texas School Nurse Association, Wednesday July 27, Austin

Quarterly Statistics Where Executive Director Closed Cases in Compliance with Board Policy:

Case Resolution Report
March 1, 2011 through May 31, 2011

Type of Action	Total
No Jurisdiction	7
No Violation	2
No Action	364
Insufficient Evidence	69
Admonish	6
Without Prejudice	497
TPAPN Referrals	133
EEP Referrals	8
Corrective Actions	1
Totals	1087

LVN DISCIPLINARY ORDERS

Time frame: March 1, 2011, through May 31, 2011

DISCIPLINARY	
32	<p>FINE WITH REMEDIAL EDUCATION</p> <ul style="list-style-type: none"> 26 Submitted an Application/Renewal Document in which false, deceptive, and/or misleading information was given by failing to disclose a criminal history 2 Failed to comply with mandatory reporting requirements 1 Had knowledge that unlicensed personnel were administering medicated eye drops 1 Failed to perform a focused assessment and failed to notify the physician of hip pain 2 Practiced Nursing without a valid license
15	<p>REMEDIAL EDUCATION</p> <ul style="list-style-type: none"> 1 Withdrew Dilaudid, but failed to document the administration 1 Convicted of Failure to Stop and Render Aid; deferred judgment for felony Aggravated Assault and misdemeanor Theft by Check 1 Failed to maintain patient confidentiality 1 Failed to perform the five rights of medication administration 1 Erroneously administered intravenous Neosynephrine 1 Failed to document the administration of medications; failed to provide adequate care 1 Convicted of three counts of the felony offense of Aggravated Promotion of Prostitution 1 Diverted Augmentin, Cephalexin, Ciprofloxacin, Fluoxetine, Promethazine, Nitrofurantoin and Levaquine 1 Convicted of the felony offenses of Obtaining Cash, Merchandise or Other Valuable Good by Means of False and Bogus Check and Unauthorized Use of a Motor Vehicle 1 Practiced Nursing without a valid license 1 Convicted of Theft by Check 1 Removed Ativan from the dispense medication system and administered it to a nurse 1 Failed to initiate Cardiopulmonary Resuscitation or call rapid response when a patient was found without breath or pulse 1 Failed to document snoring and irregular respiration during sleep for a patient on medication that could cause respiratory depression 1 Practiced beyond scope of practice
11	<p>TPAPN BOARD ORDER</p> <ul style="list-style-type: none"> 1 Deferred sentence for felony Driving While Intoxicated w/ Child Under 15; Intemperate use of Hydromorphone 1 Entered drug detox for prescription drug use 1 Entered treatment for bipolar disorder and chemical dependency/abuse 1 Obtained Phendimetrazine from numerous pharmacies, under her own name 1 Intemperate use of Cocaine 1 Convicted of Theft by Check, Failure to Identify, Theft, Failure to Appear and Schedule I: Hallucinogenic Sub Poss witd Marijuana 1 Intemperate use of Marijuana 1 Engaged in the unlawful use of Cocaine, Morphine and Soma 2 Intemperate use of Amphetamine/Methamphetamine 1 Positive drug screen for Marijuana

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VOLUNTARY SURRENDER

- 5 Non compliance with previous Board Order
- 1 Deferred sentence for felony Indecency with a Child
- 1 Obtained Hydrocodone and Xanax for own personal use through fraudulent orders
- 1 Currently serving a deferred probation sentence for felony Forgery, Money Laundering and Injury to a Child
- 1 Non disclosure of criminal history on three renewal forms; intemperate use of Xanax
- 1 Currently serving a deferred probation sentence for felony Theft of Firearm
- 1 Currently serving probation for Conspiracy to Manufacture 50 Grams of Actual Methamphetamine and Possession of Pseudoephedrine and List 1 Chemicals with Intent to Manufacture Methamphetamine
- 1 Failed to assess and evaluate a patient; failed to supervise the nursing care of a patient
- 2 Convicted of felony Driving While Intoxicated - 3rd
- 1 Currently serving a deferred sentence for felony Sexual Assault of a Child
- 1 Disciplinary action taken by another licensing authority
- 1 Withdrew Hydromorphone but failed to document the administration; currently serving deferred probation for Obtain Controlled Substance by Fraud - Schedule III
- 1 Currently serving a Deferred probation sentence for felony Secure Execution of a Document by Deception
- 1 Misappropriated Hydrocodone/Norco from wasted/discontinued medications being held for destruction; indicted on two counts of Tampering with Government Record
- 23 Submitted a statement of Voluntary Surrender

LVN ENDORSEMENT/PETITIONER DISCIPLINARY ORDERS

Time frame: March 1, 2011, through May 31, 2011

45	ENDORSEMENTS 2 Disciplinary action taken by another licensing authority 1 Convicted of felony Manufacture, Sell, Distribute or Possess a Controlled Substance 5 Non disclosure of Criminal History or Disciplinary Action on Application for Licensure by Endorsement 37 No Grounds for Denial
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APPLICANTS/ PETITIONERS

- 1 Non-disclosure of Criminal History
- 1 Deferred sentence for felony Aggravated Assault Causes Serious Bodily Injury
- 1 Deferred sentence for felony Secure Execution of Document by Deception
- 1 Article 15 for Driving Under the Influence of an Intoxicated Liquor and misdemeanor Driving Under the Influence of Liquor
- 1 Deferred sentence for felony Possession of a Controlled Substance; convicted of Driving while Intoxicated and Driving while License Invalid
- 1 Convicted of Resisting Arrest Search or Transport
- 1 Convicted of felony Possession of Marijuana
- 1 Deferred sentence for Shoplifting, Receiving or Transferring a Stolen Vehicle; convicted of Fraud Over 100 and Failure to Appear in Court
- 1 Deferred sentence for Fail to Identify a Fugitive from Justice and convicted of Driving While Intoxicated
- 1 Convicted of Driving While Intoxicated, Public Lewdness and Violation of Sexually Oriented Enterprise
- 1 Convicted of Controlled Substances Crime - Possession and Shoplifting/Concealment
- 1 Convicted of two counts of felony Unlawful Delivery of a Controlled Substance, to-wit: Amphetamine
- 1 Deferred sentence for felony Burglary of Habitation
- 1 Deferred Judgment for felony Possession of Marijuana
- 1 Deferred Judgment for felony Possession of Marijuana, misdemeanor Driving While License Invalid and felony Theft
- 1 Deferred Judgment for Theft and felony Robbery
- 1 Convicted of Driving While Intoxicated; deferred sentence for 2 counts of felony Possession of a Controlled Substance
- 1 Convicted of felony Interstate Transportation of Stolen Property
- 1 Convicted of felony Theft over \$750; 2 counts of misdemeanor Theft and Criminal Trespass
- 1 Convicted of felony Theft by Check and misdemeanor Possession of Marijuana
- 1 Convicted of Aggravated Assault Causes Serious Bodily Injury and deferred sentence for felony Theft
- 1 Deferred sentence for felony Theft of Property
- 1 Convicted of misdemeanor Fraud Destroy Removal Concealment Writing; deferred judgment for Attempt to Tamper with Government Records
- 2 Disciplinary action taken by another licensing authority
- 1 Convicted of two counts of Possession, With Intent to Distribute A Quantity of Marijuana and Driving While Intoxicated
- 1 Deferred sentence for felony Credit Card Abuse and misdemeanor Theft
- 3 Convicted of two counts of Driving While Intoxicated
- 1 Deferred sentence for felony Securing Execution of Document by Deception
- 1 Convicted of Theft of Property, deferred sentence for Theft and two counts of Theft of Service
- 1 Deferred Judgment for Theft; convicted of Driving While Intoxicated and two counts of Assault
- 1 Convicted of felony Burglary of Vehicle and misdemeanor Intentionally and Knowingly Carry a Weapon and Failure to Appear
- 1 Convicted of felony Forgery
- 1 Diagnosed with Bipolar Disorder
- 3 Entered treatment for substance abuse
- 8 Denial of Licensure
- 424 No Grounds for Denial/Youthful Indiscretion

LVN CORRECTIVE ACTION

Time frame: March 1, 2011, through May 31, 2011

17	<p>CORRECTIVE ACTION</p> <ul style="list-style-type: none"> 2 Non disclosure of Possession of Marijuana 1 Non disclosure of Issuance of a Bad Check 6 Non disclosure of Theft 1 Non disclosure of Driving While Intoxicated 1 Non disclosure of Interfere with Duties of Public Servant 3 Practiced Vocational Nursing without a valid license 2 Non disclosure of Assault Causes Bodily Injury 1 Authorized prescriptions for controlled substances after Registration Number expired
5	<p>ENDORSEMENTS</p> <ul style="list-style-type: none"> 1 Non disclosure of Attempted Theft 1 Non disclosure of Driving Under the Influence 1 Non disclosure of Battery Cause Bodily Harm 1 Non disclosure of Shoplifting 1 Non disclosure of Hot check/Personal Service Up to \$200
5	<p>APPLICANTS/ PETITIONERS</p> <ul style="list-style-type: none"> 2 Non disclosure of Theft 1 Non disclosure of False Alarm-Report 1 Non disclosure of Assault Causing Bodily Injury 1 Non disclosure of Sale of Alcohol to a Minor

LVN DEFERRED DISCIPLINE

Time frame: March 1, 2011, through May 31, 2011

1	<p>DEFERRED DISCIPLINE</p> <ul style="list-style-type: none"> 1 Performed unauthorized Incision and Drainage on a fellow employee without physicians order
3	<p>REMEDIAL EDUCATION - DEFERRED DISCIPLINE</p> <ul style="list-style-type: none"> 1 Administered six cans of Glucerna at one time through the gastrostomy tube instead of 1 every 4 hours 1 Misappropriated Zofran 1 Failed to notify physician prior to increasing patient's dose of Lasix 10mg

RN DISCIPLINARY ORDERS

Time frame: March 1, 2011, through May 31, 2011

DISCIPLINARY	
41	<p>FINE WITH REMEDIAL EDUCATION</p> <ul style="list-style-type: none"> 26 Submitted an Application/Renewal Document in which false, deceptive, and/or misleading information was given by failing to disclose a criminal history 3 Practice professional nursing without a valid license 2 Failed to comply with mandatory reporting requirements 1 Sentenced to deferred probation for Possession of Marijuana 1 Administered Botox without adequate training 1 Took a picture of a patient without consent and uploaded the photo to her Face Book account 1 Directed a Licensed Vocational Nurse to illuminate the foot of a seven month old infant using an unapproved light source 1 Had knowledge that unlicensed personnel were administering medicated eye drops 1 Failed to verify an incomplete physicians order to administer Valium 1 Authorized prescriptions for controlled substances after registration number expired 1 Convicted of two counts of Driving while Intoxicated 1 Signed prescription drug orders and/or telephonically communicated prescriptions without prescriptive authority 1 Practiced as an Adult Nurse Practitioner without maintaining certification
20	<p>REMEDIAL EDUCATION</p> <ul style="list-style-type: none"> 1 Failed to report a status change as ordered 1 Inappropriately accepted a nursing assignment where she lacked education, experience and/or knowledge 1 Failed to document the refusal by a patient for a chest x-ray 1 Failed to document the administration of medications; failed to provide adequate care 1 Engaged in financial exploitation of a patient by receiving money for alleged services directly from patient 1 Documented the administration of medications not administered 1 Administered Fluconazole in excess of physician's order; failed to notify physicians no culture was taken 1 Failed to document the administration of Demerol; Openly admitted an addiction to Demerol 1 Erroneously administered intravenous Neosynephrine 1 Failed to assess and document a complete patient assessment 1 Failed to follow facility poly to scan medication prior to administration 1 Intemperate use of Ativan 1 Had knowledge that unlicensed personal were administering medicated eye drops 1 Failed to obtain admission orders 1 Failed to document a narrative of nursing care, input and output, and failed to perform chart checks 1 Failed to perform the five rights of medication administration 1 Left patient sitting in a wheelchair in the emergency room lobby to wait for transportation 1 Failed to maintain patient confidentiality 1 Misidentified a patient as the persona scheduled for a surgical procedure 1 Administered medication without a physicians order

42	<p>VOLUNTARY SURRENDER</p> <ul style="list-style-type: none"> 2 Disciplinary action taken by another licensing authority 1 Fraudulently obtained a prescription for Vicodin, using two patient's names; deferred sentence for Obtain Drugs by Fraud - Schedule III 1 Unauthorized telephonically communicated prescription for Lortab; deferred sentence for Obtain Drugs by Fraud - Sch II/IV and Fraud Del CS/Prescription Sch III/IV/V 1 Intemperate use of Alcohol 1 Bit a patient on the cheek which caused bruising 1 Deferred sentence for Poss CS PG 1<1G 1 Misappropriated Hydrocodone/Norco from wasted/discontinued medications being held for destruction; indicted on two counts of Tampering with Government Record 1 Attempted to obtain Xanax, Vicoprofen and Flexen from Pharmacy under her own name; Obtained Xanax, Vicoprofen, Meloxicam, Darvocet and Ambien using a fraudulent oral prescription 1 Deferred sentence for felony Indecency with a Child 1 Suffered a manic break while on duty 1 Inappropriately touched patient on her breast; inappropriately touched patient on her breast and groin area 5 Non compliance with previous Board Order 25 Submitted a statement of Voluntary Surrender
21	<p>TPAPN BOARD ORDER</p> <ul style="list-style-type: none"> 1 Withdrew Morphine, Fentanyl, Hydromorphone and Morphine, misappropriation of Fentanyl, Hydromorphone, and Morphine 1 Convicted of Driving While Intoxicated - 2nd 1 Deferred sentence for felony Driving While Intoxicated w/ Child Under 15; Intemperate use of Hydromorphone 1 Obtained or attempted to obtain Norco and Flexeril 1 Misappropriated Hydromorphone; intemperate use of Hydrocodone; Deferred sentence for Possess or Obtain a Prescription by Fraud, Poss CS/Prescription Sch III/IV & Possession of a Dangerous Drug 2 Lacked fitness to practice nursing 1 Intemperate use of Morphine and Dilaudid 1 Admitted to chemical dependency and voluntarily entered treatment 1 Intemperate use of Marijuana and Cocaine 1 Entered treatment for alcoholism 1 Convicted of two counts of Driving While Intoxicated 1 Intemperate use of Cocaine, Barbiturate and Benzodiazepines 1 Convicted of three counts of Driving While Intoxicated 1 Convicted of Driving While Intoxicated; treated for Opiate addiction 1 Intemperate use of Marijuana 1 Convicted of Indecent Exposure, deferred sentence for Indecent Exposure and Theft by Check; entered treatment following admission of drug abuse 1 Intemperate use of Meperidine and Opiates 1 Administered Phenergan 12.5mg instead of 6.25; withdrew Morphine and Demerol in excess; Intemperate use of Meperidine and Propoxyphene 1 Intemperate use of Amphetamine/Methamphetamine 1 Deferred sentence for Driving While Intoxicated w/Child Under 15

RN ENDORSEMENT/PETITIONER DISCIPLINARY ORDERS

Time frame: March 1, 2011, through May 31, 2011

149	<p>ENDORSEMENTS</p> <ul style="list-style-type: none"> 6 Disciplinary action taken by another licensing authority 1 Denial of Licensure 1 Entered treatment for addiction 1 Convicted of felony using Psylocybin and Lysergic. 1 Convicted of Driving While Intoxicated and Driving Under the Influence of Liquor 1 Convicted of felony Criminal Mischief 1 Convicted of felony Forgery 4 Non disclosure of Criminal History or Disciplinary Action on Application for Licensure by Endorsement 133 No Grounds for Denial
742	<p>APPLICANTS/ PETITIONERS</p> <ul style="list-style-type: none"> 1 Non disclosure of Criminal History or Disciplinary Action on Application for Licensure by Examination 7 Denial of Licensure 1 Convicted of felony Possession of a Controlled Substance - Cocaine and misdemeanor Theft by Check 1 Convicted of two counts of Driving While Intoxicated 1 Convicted of 4 counts Failure to Appear, 14 counts Violation of Hot Checks Law, Theft of Property, Possession of a Controlled Substance, 6 counts Driving Under Suspension, and Domestic Abuse 1 Convicted of felony Theft 1 Convicted of Possession of Marijuana, Disorderly Conduct and Assault Bodily Injury - FM 1 Entered treatment for alcohol abuse 1 Diagnosed with Bipolar Disorder 1 Convicted of felony two counts Attempted Embezzlement 1 Deferred sentence for felony Credit/Debit Card Abuse 1 Deferred sentence for felony Unlawfully, Intentionally and Knowingly Possess a Controlled Substance, Namely Cocaine 1 Convicted of Driving While Intoxicated 1 Convicted of felony Forgery 1 Convicted of two counts felony Possession of Methamphetamine 1 Deferred sentence for Criminal Mischief and Theft; convicted of Driving While License Suspended and Credit Card Misuse 1 Convicted of Theft, Prostitution, felony Robbery and felony Forgery by Possession 1 Convicted of ATT Theft AM Info 1 Convicted of Criminal Mischief and Theft of Property 1 Convicted of Possession of Marijuana and Theft 1 Convicted of felony Robbery 1 Deferred sentence for Possession of a Controlled Substance 2 Deferred sentence for Possession of Marijuana; convicted of Driving While Intoxicated 3 Deferred sentence for felony Theft of Property 2 Convicted of felony Theft of Livestock 1 Convicted of Possession of Marijuana and felony Possession of Methamphetamine with Intent to Deliver 1 Deferred sentence for felony Aggravated Battery 1 Convicted of Theft, Possession of Marijuana, Theft of Service Drivers License/ID False 1 Convicted of felony Bank Fraud & Embezzlement, misdemeanor Theft With Check Over Twenty Dollars 4 Disciplinary action taken by another Licensing Authority 699 No Grounds for Denial/Youthful Indiscretion

RN CORRECTIVE ACTION

Time frame: March 1, 2011, through May 31, 2011

24	<p>CORRECTIVE ACTION</p> <ul style="list-style-type: none"> 8 Non disclosure of Driving While Intoxicated 2 Non disclosure of Issuance of a Bad Check 1 Non disclosure of Assault Causes Bodily Injury 1 Non disclosure of Criminal Mischief 2 Non disclosure of Possession of Marijuana 1 Non disclosure of Disorderly Conduct 1 Non disclosure of Making Alcohol Available to a Minor 2 Non disclosure of Theft 1 Non disclosure of Attempted Resisting a Peace Officer 1 Non disclosure of Public Lewdness 3 Practiced Professional Nursing without a valid license 1 Authorized prescriptions for controlled substances after Registration Number expired
9	<p>ENDORSEMENT</p> <ul style="list-style-type: none"> 3 Non disclosure of Driving While Ability Impaired 1 Non disclosure of Possession of Marijuana 3 Non disclosure of Operating a Motor Vehicle While Intoxicated 1 Non disclosure of Issuing a Bad Check 1 Non disclosure of Possession of Blank Check
2	<p>APPLICANTS/ PETITIONERS</p> <ul style="list-style-type: none"> 1 Non disclosure of Theft of Property 1 Non disclosure of Assault Causes Bodily Injury

RN DEFERRED DISCIPLINE

Time frame: March 1, 2011, through May 31, 2011

4	<p>FINE WITH REMEDIAL EDUCATION - DEFERRED DISCIPLINE</p> <ul style="list-style-type: none"> 1 Practiced outside scope of practice 1 Performed unauthorized Incision and Drainage on a fellow employee without physicians order 1 Used the Title RN and practiced professional nursing without a valid license 1 Failed to document waste of unused portion of narcotics
8	<p>REMEDIAL EDUCATION - DEFERRED DISCIPLINE</p> <ul style="list-style-type: none"> 1 Misappropriated Zofran 1 Failed to notify physician prior to increasing patient's dose of Lasix 10mg 1 Administered Oxygen without physician's order 1 Inserted rectal tube without a physician's order 1 Violated nurse/client professional boundaries 1 Falsely documented the time Transcutaneous Bilireben test was administered 1 Failed to monitor and supervise the nursing care and performance of tasks by her nursing staff 1 Performed a dialysis treatment

Board of Nursing - Statistical Report FY 2011

Measure	Totals FY'08	Totals FY'09	Totals FY'10	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Running FY 2011 Total
Nursing Jurisprudence Exam	n/a	18,886	27,177	6,149	5,982	8,686	0	20,817
Exam Not Completed		825	1,845	307	256	301	0	864
Percentage Not Completed		4.37%	6.79%	4.99%	4.28%	3.47%	??	4.15%
Did Not Passed		485	1,602	566	562	657	0	1,785
Percentage Did Not Pass		2.57%	5.89%	9.20%	9.39%	7.56%	??	8.57%
Exam Passed		17,576	23,730	5,276	5,164	7,728	0	18,168
Percentage Exam Passed		93.06%	87.32%	85.80%	86.33%	88.97%	??	87.27%
NJE - Breakdown by Applicant Group								
LVN-Candidate		4,627	7,266	1,646	1,597	1,595	0	4,838
Exam Not Completed		282	835	105	93	73		271
Did Not Passed		177	723	209	226	224		659
Exam Passed		4,168	5,708	1,332	1,278	1,298		3,908
LVN-Endorsement		938	1,384	433	355	469	0	1,257
Exam Not Completed		57	94	25	17	26		68
Did Not Passed		90	193	96	92	111		299
Exam Passed		791	1,097	312	246	332		890
RN-Candidate		8,104	10,929	2,137	2,360	4,645	0	9,142
Exam Not Completed		265	569	80	68	117		265
Did Not Passed		35	250	85	74	138		297
Exam Passed		7,804	10,110	1,972	2,218	4,390		8,580
RN-Endorsement		5,217	7,598	1,933	1,670	1,977	0	5,580
Exam Not Completed		221	347	97	78	85		260
Did Not Passed		183	436	176	170	184		530
Exam Passed		4,813	6,815	1,660	1,422	1,708		4,790

2011

National Council of State Boards of Nursing Member and Associate Member Websites: Website Usability Audit Final Project Report



Prepared by:

Concord Evaluation Group, LLC

Prepared for:

Ms. Tammy Spangler

Director, Interactive Services

National Council of State Boards of
Nursing

111 E. Wacker Drive, Suite 2900

Chicago, IL 60601-4277

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This research was performed on behalf of the National Council of State Boards of Nursing.

Contacts

For questions or more information about the **usability study**, please contact:

Christine Andrews Paulsen, Ph.D.

Owner and Principal Research Scientist

Concord Evaluation Group, LLC

PO Box 694

Concord, MA 01742

978.369.3519

cpaulsen@concordevaluation.com

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About the Project

Between January and March of 2011, Concord Evaluation Group (CEG) assisted the National Council of State Boards of Nursing (NCSBN) in evaluating and enhancing a total of 62 board of nursing (BON) member and associate member websites.¹ The listing of websites is included in Appendix A. NCSBN aimed to support BONs in their goals of providing transparency to consumers about information regarding licensing of nurses and associated disciplinary actions. The intent of a review of BON websites was to provide constructive feedback on how to improve website transparency and ease of use for consumers.

Our approach included two separate but related research activities:

1. **Expert, Heuristic Review (Usability Audit):** Three usability experts conducted independent reviews of each of the BON websites. This final project report provides an overview of the key findings and recommendations that we found consistently across most of the BON websites.
2. **Usability Testing:** We conducted eight (8) usability interviews with BON website users in Pennsylvania, North Carolina, Kansas, Wyoming, and Louisiana.

The objectives of the research activities were to:

1. Determine the extent to which the 62 BON websites individually and collectively met the specific user needs of their consumer audiences.
2. Make actionable recommendations to enhance the BON websites based on our internal expert, heuristic review and usability findings.

CEG will present key findings and recommendations applicable to all 62 websites at the NCSBN NLC and Consumer Conference in June 2011. The research activities are described in further detail below.

Methodology: Expert, Heuristic Review

We conducted the expert review of the BON member and associate member websites between January and March of 2011. To review the websites, we used them in ways that mirrored their use by intended users, with the goal of discovering usability strengths as well as specific areas in need of enhancement to improve their usability.

Three trained reviewers completed a series of commonly performed user tasks. The tasks were constructed with input from a working group of NCSBN members (see Appendix C for participant list). During the completion of the user tasks, the reviewers independently explored each BON website in depth to determine its usability strengths and weaknesses. The list of tasks

¹ Four boards do not have websites: America Samoa, Bermuda, Guam, and the US Virgin Islands. The Nebraska APRN board and the Nebraska nursing board share the same website.

is included in Appendix B, and include, for example, how to find the latest discipline information about nurses and how to file a complaint against a nurse. Specifically, the reviewers:

- Compared the features, function, and design of the BON websites to established heuristics and accepted best practices within the fields of usability and accessibility. The specific heuristics and standards included:
 - Koyani, S.J., Bailey, R.W., & Nall, J.R. (2006). *Research-based Web Design and Usability Guidelines*. Washington, DC: US Department of Health and Human Services and can be found at http://www.usability.gov/guidelines/guidelines_book.pdf. (PDF file)
 - Section 508 Standards outlined in Subpart B, Technical Standards (§ 1194.22 Web-based intranet and internet information and applications).
 - Web Content Accessibility Guidelines 2.0 (WCAG 2.0) published by the Web Accessibility Initiative of the World Wide Web Consortium (December 2008).

The reviews were driven by the following research questions:

- **Conceptual Model:** Is the overall purpose of the site clear? It is easy for users to “get their heads” around the site? Does the site contain plain language that is easily understood by all of its intended users? Is it free of jargon? Are acronyms and organizational language defined elsewhere?
 - **Information Architecture and Navigation:** Is the site organized in an intuitive way? Is content organized under intuitive headings and placed on the right pages? Does the site categorize all of its resources in a simple manner? Is there any missing content? It is easy for users to quickly move around the site? Can users easily move from page to page while not feeling lost?
 - **Visual Design:** Is the site visually appealing to its users? Does its design aid users in navigating through the site and accomplishing their goals? Are emphasis techniques such as bold, italics, and underlining used effectively to help users complete tasks?
 - **Functionality:** Does the site function the way it should? Are the links active? Does the search function work properly and meet user expectations?
 - **Accessibility:** Is the website accessible for users of assistive technologies (e.g., JAWS screen reader)?
- Recommended specific enhancements to the websites so they might better meet the needs of their users.
 - Determined which findings should be explored further in usability testing.

- Reported the top usability strengths and problems of each BON website in concise, four to six page memoranda.

Reviewers used each website while taking the perspective of the following key personas² with varying degrees of technical expertise and institutional knowledge:

- Nurse and prospective nurse
- Government personnel (state and federal agencies, legislators and lawmakers)
- General public and media
- Researcher / educator
- Other BONs and board members

For a sample of working group sites, we also conducted an intensive accessibility review in which one of our expert reviewers used the websites with the assistance of a screen reader, JAWS, to test the sites for users with blindness or visual impairments. We also tested the sites using the keyboard only (without the use of a mouse) to evaluate their accessibility for users with mobility impairments.

Methodology: Usability Testing

We complemented our expert, heuristic reviews with a small usability study with eight (8) users. Working group members from five different NCSBN member states participated in the usability study: North Carolina, Pennsylvania, Kansas, Louisiana, and Wyoming. These working group members identified usability interview participants that resembled the different personas we created to guide our review.

The usability testing evaluated the same key topics we used in our expert, heuristic review. The purpose of the usability test sessions was to evaluate the effectiveness of the following features of the BON website:

- Overall conceptual model,
- Information architecture and navigation,
- Visual design, and
- Functionality.

In addition, we evaluated the extent to which participants reported that the BON website was meeting their needs. We did not conduct accessibility testing as part of the usability tests.

Each of the usability test sessions was performed remotely. Participants were able to participate in the testing from the comfort of their own desks, using their own browsers and equipment. The test moderator connected to the participants' desktops using web conferencing software. The participants were also connected to the moderator using a phone line or VOIP connection so that

² Personas represent specific types of individuals who may commonly use a website. For example, a prospective nurse might be a persona.

we could record audio in addition to mouse movements and screen shots. Observers from NCSBN were also invited to attend and watch the sessions remotely and unobtrusively.

The user task list (Appendix B) was used to guide the remote sessions. During the sessions, participants were instructed to attempt the user tasks. Participants were instructed to think aloud so that CEG could follow their thought processes. Sessions lasted no longer than 90 minutes and some participants were paid an honorarium of \$50.³

How this Report is Organized

Within each of the following areas: (1) overall conceptual model, (2) information architecture and navigation, (3) visual design, (4) functionality, and (5) accessibility, the usability findings in this report are organized according to the following categories:

- **Usability Strengths:** This section provides an overview of the common usability strengths that we observed consistently across most of the BON websites.
- **Usability Challenges and High Priority Recommendations:** Here, we discuss the common usability challenges that we observed across many of the BON websites. Included with this list of challenges are recommendations that each BON could consider to enhance the overall usability of its website. Where appropriate, we have integrated usability interview findings that illustrate those challenges that we found during our expert review.

*Note: The examples illustrated in this report are samples of what we found during the review and are intended to be applied to all BON websites as appropriate. **The BON examples used are not meant to single-out sites for criticism, but are for illustrative purposes.** This report does not include all examples that we included in all of the individual reports, but rather, those that we consider the most common and of the highest priority.*

- **Appendix A:** This section includes the list of BON member and associate member websites that we reviewed during the expert, heuristic review.
- **Appendix B:** This section includes the task list we used to guide the expert reviews and usability test interviews.
- **Appendix C:** This section includes a list of workgroup participants.

³ Participants who were employed by the NCSBN were not paid and other participants donated their honoraria to their home institutions.

Findings and Recommendations

Conceptual Model

Usability Strengths

Throughout the project, we found that the conceptual model of most of the BON websites was largely intuitive. Reviewers and usability interview participants were usually able to immediately understand the different kinds of resources and specific content that the websites offered.

In addition, reviewers found that the vast majority of websites made clear their overall purpose as well as what audiences they were targeting, which are two of the most important qualities of any information resource.⁴ In general, reviewers and usability test participants alike were able to immediately determine the types of content available on the websites.

When asked about the Wyoming BON website, one usability test participant commented, “It’s not difficult to operate and the labels have a logical flow. What is important is always out first. It has a nice look.”

In all but a few instances, reviewers found that the websites were frequently updated with the latest meeting minutes and schedules, newsletters, and reminders. Web content that is kept up-to-date helps ensure website credibility.⁵ As one usability participant told us, she knew that the Kansas BON website was up-to-date “Because of that (up to date) board meeting stuff.”

Usability Challenges and High Priority Recommendations

Reviewers found, that in some cases, usability challenges impacted the overall conceptual model of some of the websites. The following are some specific conceptual model challenges that we uncovered during our reviews. They are described in further detail below:

- **Non-matching link and page heading titles**
- **Counter-intuitive link and heading titles**
- **Lack of comprehensive Frequently Asked Questions sections**

Non-matching Link and Page Heading Titles

In several cases, we found that link and heading titles did not always match, as shown in the example below.

⁴ Asher, 1980; Badre, 2002, Baldwin, Peleg-Bruckner and McClintock 1985; Celsi and Olson, 1988; Evans, 1998; Levine, 1996; Nielsen and Tahir, 2002; Nielsen, 1997b; Nielsen, 2000, Rajani and Rosenberg, 1999; Sano, 1996; Sinha, et al., 2001; Spyridakis, 2000; Stevens, 1980.

⁵ Fogg, 2002; Fogg, et al., 2001; Lightner, 2003; Nielsen, 2003.



Figure 1. Different link titles and page headings on the Louisiana BON website.

So that users can quickly orient themselves on a page and feel confident that they are in the right place, we recommend that all link titles exactly match the page and heading titles to which they refer. Otherwise, users might get confused about the purpose of the page to which they have navigated and for whom it is intended.

Counter-Intuitive Link and Heading Titles

Reviewers found that in some cases, link and heading titles were not immediately intuitive. Link and heading titles should immediately convey to all users what types of content they contain.⁶ Otherwise, users may be confused about what types of content are included on specific pages, thereby inhibiting their ability to fully understand the webpage’s reason for being included in the first place. In the example shown in the figure below, the Licensed Practical Nurse, Licensed Practical Nurse-Certified, and Registered Nurse links did not immediately convey to the reviewer that he could find education-related information by clicking on those links.

[Licensed Practical Nurse \(LPN\)](#) - Nine months to one year of education in a community college. Must always practice under the direction of a registered nurse or other licensed practitioner.

[License Practical Nurse-Certified \(LPN-C\)](#) - An LPN who has additional education and certification to provide limited services in intravenous therapy.

[Registered Nurse \(RN\)](#) - Two to four years of education at a college or university. Registered nurses may practice independently.

Figure 2. Counter-intuitive link titles on the Nebraska BON website.

One usability test participant commented on the link titles presented on the North Carolina BON website by saying, “I think sometimes the terminology that’s used is not clear. It is clear to them because they are a regulatory agency, but it isn’t clear to someone from the outside that is looking for a generic term that’s accessible.”

⁶ Allinson and Hammond, 1999; Badre, 2002; Koyani, 2001b.

We recommend that any links that may not be immediately intuitive be revised so they clearly identify the types of content that they contain.

Lack of Comprehensive Frequently Asked Questions Sections

Reviewers found that most of the sites did not include comprehensive Frequently Asked Questions (FAQs) sections. FAQ sections are especially helpful to new users because they help them quickly answer questions that might otherwise take time to find within the larger architecture of the website.⁷ For example, in several cases, reviewers sought specific answers to questions about Nurse Licensure Compact requirements, education requirements, and disciplinary enforcement information that could have been easily addressed by FAQ sections.

We recommend that to the extent possible, that the BON websites include a comprehensive FAQ section that applies to all of the main content on the website.

Information Architecture and Navigation

Usability Strengths

We found that in several cases, websites clearly presented main links from their homepage. This enabled reviewers and usability test participants to clearly understand what main topics to click on to find specific information. In these instances, the websites did not include links that appeared out of place or confusing.

As one usability test participant told us when navigating the homepage of the North Carolina BON website, “It [the link] said Verify License which was exactly what I was looking for.”

Below are examples of clearly organized top navigation menus on the Arkansas and Georgia websites (this is not an exhaustive list).



Figure 3. Clearly organized top navigation menu on the Arkansas BON page.

⁷ Fogg, 2002; Fogg, et al., 2001; Lightner, 2003; Nielsen, 2003.



Figure 4. Clearly organized top navigation menu on the Georgia BON page.

In addition, rarely did reviewers or usability test participants get “lost” while navigating the webpages. In only rare cases did a reviewer or usability test participant find that he or she could not complete a task due to a navigation problem.

In fact, as shown below, several sites used a “breadcrumb trail” to show users how they were navigating through the BON pages. The breadcrumb trail was an effective tool that helped reviewers and usability interview participants understand how they were navigating to specific content and how to return to previously visited pages.

As one usability test participant told us about the breadcrumb trail, “It’s always nice to see that familiar bar.”



Figure 5. The helpful “breadcrumb trail” on the Massachusetts BON page.

Usability Challenges and High Priority Recommendations

We found that many of the websites, however, had usability challenges related to navigation. These included:

- **Missing PDF file and external link notifications**
- **Missing “Home” links**
- **Excessive scrolling and crowded pages**
- **Lack of categorized content**

Missing PDF File and External Link Notifications

Reviewers often noticed that many of the BON websites did not notify users that certain links navigated them to Adobe PDF files or external links. Often times, reviewers expected certain

links to navigate them to other webpages within the BON website. However, they often unexpectedly navigated the reviewers to Adobe PDF files or external websites. This made the navigation process inefficient and sometimes frustrating, especially since reviewers weren't always immediately certain how to return to the homepage. This can be especially difficult for blind users who may lose track of where they are navigating as they unexpectedly land on a document instead of another webpage. We also observed this during the usability interviews.

As one usability test participant told us when asked if she expected a PDF file to open up when clicking on the link, she said, "I didn't expect that to happen. I expected it to go to a page with a listing of the various Boards."

We recommend, as shown in the example below, that links indicate to users when files are PDFs or links to external sites so that users do not get confused or disoriented.⁸

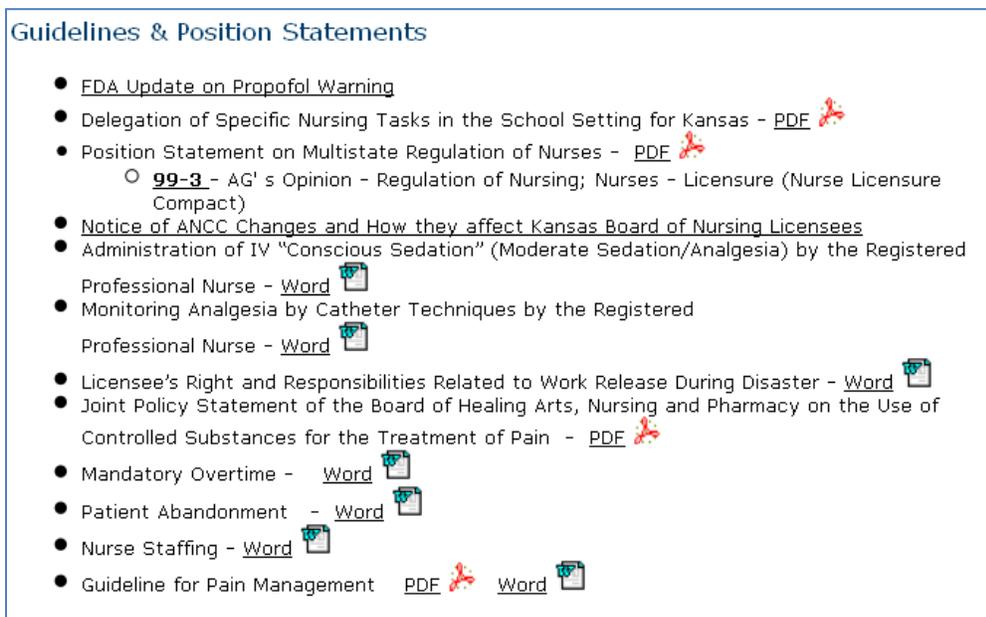


Figure 6. The helpful file notations on the Kansas BON page.

Missing "Home" Links

Due to the large amount of content on the various BON pages, it was sometimes necessary for reviewers and usability test participants to navigate extensively throughout the websites. Often times, users were required to navigate to external pages that were part of the various state pages. While the navigation to these various pages was not necessarily a usability issue, the websites made it difficult for users to return back to the BON homepage. Often times, users were forced to rely on their browser's Back button to bring them back to the main page.

⁸ Nall, Koyani and Lafond, 2001; Nielsen and Tahir, 2002; Spool, et al., 1997.

One usability test participant told us when using her state’s BON site, “(I) really needed that Home link.”

We recommend that, to the extent possible, the BON pages add an easy way to go back to the homepage by adding a “BON Home” link on either the top or left navigation menus. Users will always seek an easy way to get back to the homepage.⁹

Excessive Scrolling and Crowded Pages

As shown in the examples below, many pages required that users scan pages with large amounts of text to find key content. This inhibited reviewers from quickly navigating to key content on pages.

One usability participant told us when using the Kansas BON homepage that “I’d expect (the main headings in the body of the homepage) to be top menu items...this is a lot of information to scroll through...I’m not opposed to clicking.”



Figure 7. The large amount of text on the Kansas BON homepage.

⁹ Bailey, 2000b; Detweiler and Omanson, 1996; IBM, 1999; Levine, 1996; Lynch and Horton, 2002; Nielsen and Tahir, 2002; Spool, et al., 1997; Tullis, 2001.

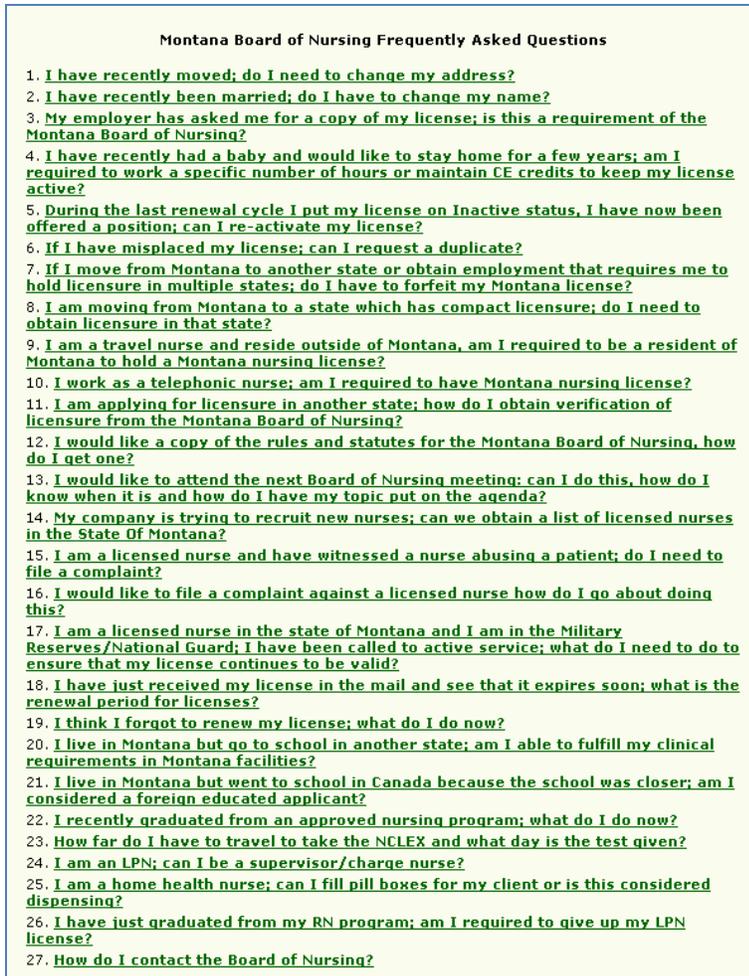


Figure 8. The list of Frequently Asked Questions on the Montana BON page.

Another example of formatting issues was found when accessing the Frequently Asked Questions page on the Wyoming BON website, and one usability test participant commented, “We need to do a lot of updates and an easier, more user friendly format.” Furthermore, she said, “I would give it a one, with one being the worst, because I have to scroll down to find it [the answer.]”

We recommend that text be reduced as much as possible on lengthy pages, and that the BON websites implement these enhancements, if possible:

- Include a table of contents at top of the page so users can quickly “jump” to the content they seek on the page.¹⁰ In addition, most users look for links and major headings at the

¹⁰ Bieber, 1997; Farkas and Farkas, 2000; Haas and Grams, 1998; Levine, 1996; Nall, Koyani and Lafond, 2001; Spool, et al., 1997; Spyridakis, 2000; Williams, 2000; Zimmerman, Slater and Kendall, 2001.

top of pages to find key content.¹¹ Including a concise table of contents at the top of the page will help ensure that users find they content for which they are looking.

- Highlighting major items on pages that require scrolling will help users find what they need.¹²
- Be sure that pages with a large amount of content are categorized and formatted with easy to read and bolded headings so users can quickly find relevant and desired information.¹³
- Consider finding subtle ways to enhance the pages so they include more color contrast, less prose, different style headings, and images so they look more up-to-date and allow users to skim more effectively.¹⁴

Lack of Categorized Content

Reviewers found that on some sites, pages could be consolidated and categorized further. We also observed that in some cases, usability participants had to inefficiently skim long lists of links to find specific content. For example, on the Missouri BON website, the left navigation menu was long, as shown in the figure below, and could benefit by being condensed.

¹¹ Byrne, et al., 1999; Detweiler and Omanson, 1996; Faraday, 2000; Faraday, 2001; Lewenstein, et al., 2000; Mahajan and Shneiderman, 1997; Nielsen, 1996a; Nielsen, 1999b; Nielsen, 1999c; Spyridakis, 2000.

¹² Bailey, Koyani and Nall, 2000; Koyani and Bailey, 2005; Koyani, et al., 2002.

¹³ Bailey, Koyani and Nall, 2000; Evans, 1998; Flower, Hayes and Swarts, 1983; Gerhardt-Powals, 1996; Hartley and Trueman, 1983; Ivory and Hearst, 2002; Ivory, Sinha and Hearst, 2000; Lorch and Lorch, 1995; Mayer, Dyck and Cook, 1984; Meyer, 1984; Morkes and Nielsen, 1998; Morrell, et al., 2002; Murphy and Mitchell, 1986; Nielsen, 1999c; Nielsen, 1999d; Schultz and Spyridakis, 2002; Spyridakis, 1989; Spyridakis, 2000; Zimmerman and Prickett, 2000.

¹⁴ Chaparro and Bernard, 2001; Detweiler and Omanson, 1996; Levine, 1996; Nielsen and Tahir, 2002; Nygren and Allard, 1996; Spyridakis, 2000; Treisman, 1982.

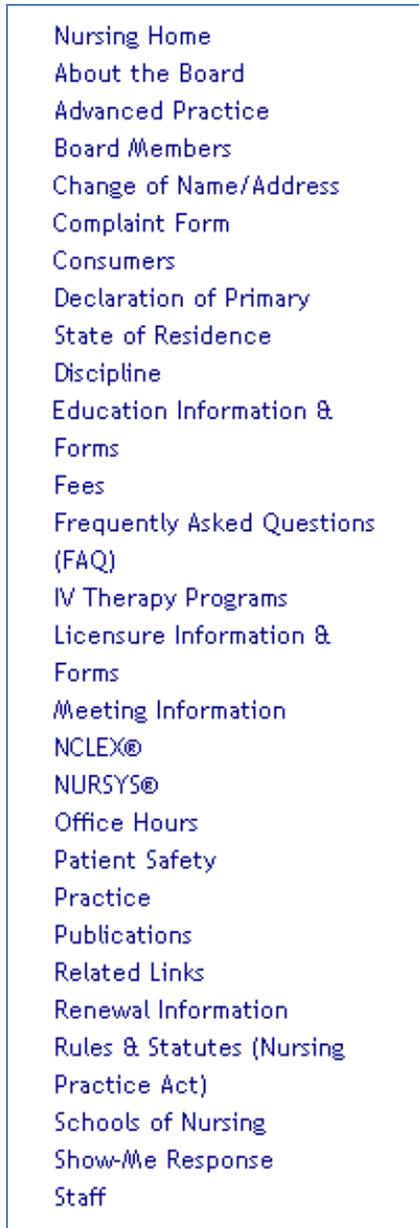


Figure 9. The long left navigation menu on the Missouri BON website.

We recommend, where possible, removing any links that users do not frequently access and consolidating links that may be closely related. In the example above, for instance, Board Members could be included within the About the Board link, since users would likely expect to find a list of board members included on the About the Board page. Including them as separate links within the left navigation menu is unnecessary and adds clutter to the menu. In addition, adding a small amount of white space between each link would help users skim the list more easily.

Visual Design

Usability Strengths

Most of the websites did not clutter the pages with needless graphics. In no instance did we observe that a website used too many images or graphics. In fact, the pages that did use graphics generally used them to subtly enhance the overall appeal of the websites.

In addition, most websites used white space sparingly, but effectively. And since too much white space can cause users to needlessly scroll to find key content, the subtle use of white space constituted a usability strength for most sites.¹⁵

Usability Challenges and High Priority Recommendations

In some cases, however, the visual design of the websites presented a usability challenge. These included:

- **Excessive use of “all caps” and red text**
- **Inconsistent and outdated formatting**

Excessive Use of “all caps” and Red Text

As indicated below, we found that many sites used excessive amounts of text in all capital letters, or, “all caps.” Text in all caps is difficult for users to read because they are used to reading lowercase letters more efficiently.¹⁶

In addition, the use of large amounts of red text can also be difficult to read for users. Red text should be used sparingly and only when absolutely necessary to convey an urgent message or warning. It is also difficult for users with some forms of color blindness to read red text.

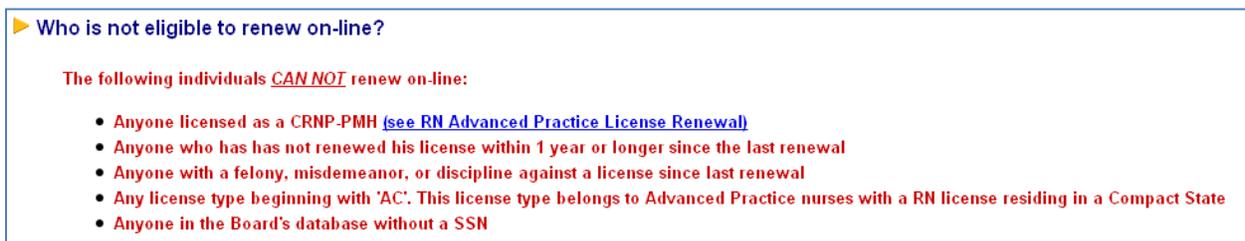


Figure 10. Use of red text on the Maryland BON page.

¹⁵ Chaparro and Bernard, 2001; Parush, Nadir and Shtub, 1998; Spool, et al., 1997; Stagers, 1993; Tullis, 1984.

¹⁶ Larson, 2004.

REGISTERED NURSE (RN) AND LICENSED PRACTICAL NURSE (LPN) APPLICATIONS

RENEWALS

- **RN RENEWAL:** This application should be used by registered nurses who wish to renew their license during a current renewal period (October 1 through December 31 – even numbered years)
- **LPN RENEWAL:** This application should be used by licensed practice nurses who wish to renew their license during a current renewal period (October 1 through December 31 – odd numbered years).

EXAMINATION

- **RN LICENSURE BY EXAMINATION:** Initial application for licensure by NCLEX-RN. This application should be used by first time candidates. [Click here](#) for the examination registration process.
- **LPN LICENSURE BY EXAMINATION:** Initial application for licensure by NCLEX-PN. This application should be used by first time candidates. [Click here](#) for the examination registration process

Figure 11. Use of “all caps” on the Mississippi BON page.

We recommend implementing different techniques to emphasize important text. For example, rather than using all caps, consider bolding or italicizing important text. Consider different ways to draw users’ attention to important text. Likewise, if red text is used, consider using regular sentence case and only bolding important phrases to draw users’ attention.

Inconsistent and Outdated Formatting

We found that many websites did not use the same formatting throughout all of the webpages that comprised the site. We recognize that in many cases, the BON pages of certain states are included as part of a larger state portal or website, and that implementing a similar look and feel presents a challenge.

<p>FAQs</p> <ul style="list-style-type: none"> Multi-State Nurse Licensure Compact Information Requesting Accommodations to the NCLEX Examination
<p>Other Useful Links</p> <ul style="list-style-type: none"> Link to National Council of State Boards of Nursing (NCSBN) Website Link to National Council National State Board Directory
<p style="text-align: center;">Alert - License and Certificate Applicants</p> <p>The Ohio Board of Nursing is revising all applications for licensure/certification to include a statement regarding access to public inform website by 10/1/10. Any current application that is complete by 10/1/10, will be accepted. Any application received, and notarized revision date that appears at the bottom of each page or it will be returned.</p>
<p style="text-align: center;">Important Applicant Information - Please Read</p>

Figure 12. Inconsistent graphic treatment of headings on the Ohio BON page.

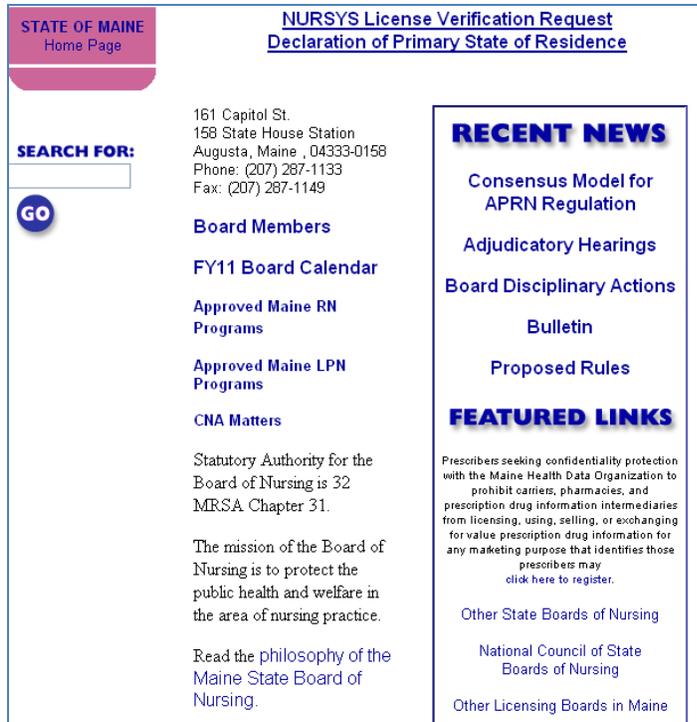


Figure 13. Inconsistent formatting on the Maine BON page.

We recommend, however, that for those Boards that do have the ability to format their own website, to ensure that every webpage reflects a hierarchical and logical flow of visual style, including heading and font sizes. This will help the site convey a logical flow of information, appear updated, and ensure a better user experience.¹⁷ Moreover, it will enhance the overall visual appeal of the website since webpages that look professionally designed contribute to the overall credibility of the website.¹⁸

Functionality

Usability Strengths

Uniformly, the sites functioned properly. Links almost always navigated users to the correct pages and in only rare cases did we find that links were inactive.

¹⁷ Benson, 1985; Clark and Haviland, 1975; Detweiler and Omanson, 1996; Dixon, 1987; Evans, 1998; Farkas and Farkas, 2000; Keyes, 1993; Keyes, Sykes and Lewis, 1988; Lynch and Horton, 2002; Nielsen and Tahir, 2002; Redish, 1993; Redish, Felker and Rose, 1981; Schroeder, 1999; Spyridakis, 2000; Tiller and Green, 1999; Wright, 1987; Zimmerman and Akerelrea, 2002; Zimmerman, et al., 2002.

¹⁸ Fogg, 2002; Fogg, et al., 2001; Lightner, 2003; Nielsen, 2003

Usability Challenges and High Priority Recommendations

Many of the sites contained search features that did not work properly. In some cases, reviewers used the search to find very specific, basic information such as contact information. But, the search would often return seemingly inaccurate and unrelated results.

In the example below, for instance, a reviewer searched for “contact” in the basic search of the North Carolina BON website. Expecting to see a search result that obviously contained contact information, he was surprised to see that the first two links were Board Sponsored Workshops and CE Providers.

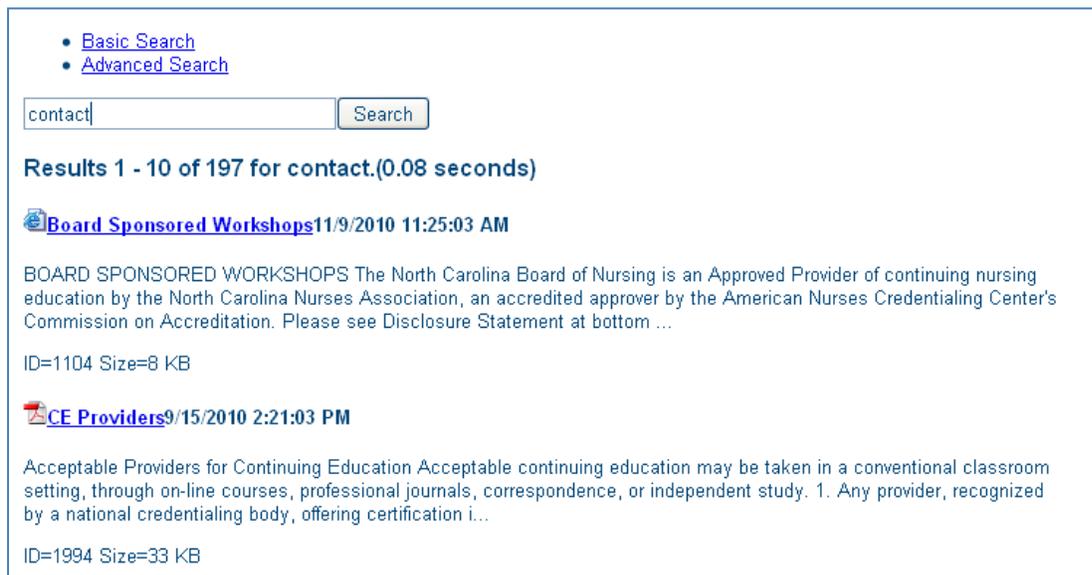


Figure 14. The search results on the North Carolina BON site which may cause confusion.

As one usability test participant commented after trying to use the search function on the North Carolina BON website, “I’m not sure what words to put in for the search.” Furthermore she said, “Unless they have put the search words in that you are putting you’re not going to find it.”

We recommend that the search features be programmed so they yield as many search results as possible that are relevant to the entered query so users feel confident that their search results are all inclusive. In addition, maintain the search query that the user entered. Finally, since users tend to search for simple terms, like the reviewer did when he searched for “Contact” in the example above, it’s important that the search function be easy to use and allow for clearly successful searches based on basic search queries.¹⁹

¹⁹ Bailey and Koyani, 2004; Bayles and Bernard, 1999; Koyani and Nall, 1999; Nielsen, 2001a; Nielsen, et al., 2000; Pollock and Hockley, 1996; Spink, Bateman and Jansen, 1999; Spool, Schroeder and Ojakaar, 2001.

Accessibility

Usability Strengths

For the most part, the websites we reviewed were accessible for users with disabilities and users of assistive technology, like screen readers. For example, the websites provided alternative text for each non-text element. Webpages were designed so that all information conveyed with color was also available without color, for example from context or markup. All the websites were usable without requiring the use of an associated style sheet. Finally, when applicable, the websites employed the use of client-side image maps instead of server-side image maps.

Usability Challenges and High Priority Recommendations

There were some accessibility challenges that we observed across some of the sites. While non-text elements were described by each site with alternative text, some of the alt text we read was nonsensical. This was especially true in cases where the alt text simply repeated the URL (e.g., Kansas and Wyoming). When announced by a screen reader, URLs make no sense to the user.

We recommend ensuring that the alternative text provided for non-text elements include words and phrases that are descriptive. They should not be long descriptions, but they should enable someone who is hearing, rather than seeing them, to understand where the link will take them.²⁰

In other cases, we found that headings could be better described for accessibility purposes. Many assistive technologies enable users to jump from header to header—or they announce the headers on the page so that users can instantly form an accurate mental model of what is contained on a given webpage. If headings in tables or on the main body of the page are not labeled as headers, blind users will miss these cues entirely.

We recommend ensuring that all headers are labeled as such to facilitate scanning by blind users as well as sighted users who would benefit from headers that are clearly marked (see finding above under Visual Design).

Another accessibility challenge we uncovered across several sites was the lack of a consistent method for users to skip repetitive navigational links. While some sites contained “Skip” links, some sites did not (e.g., North Carolina). However, even among sites that contained such links, we found that some did not have all of them programmed properly (anchors without targets) so that users couldn’t actually use them to skip navigational links (e.g., Kansas and Pennsylvania).

We recommend repairing the broken skip links and adding skip links to websites that do not already contain them.

Finally, we found that some forms were not fully accessible to screen reader users (e.g., Pennsylvania). When users land on these forms pages, their cursors should be defaulted to the

²⁰ Section 508 Standards outlined in Subpart B, Technical Standards (§ 1194.22 Web-based intranet and internet information and applications).

first form element, not subsequent fields, or the user will never know they missed a field and may not be able to continue completing the form.

Because forms are often a key component on websites like these, we recommend ensuring that forms are accessible to all users, especially users with visual impairments who cannot see the form fields and may not be able to complete the forms properly.

Summary of Recommendations

Below is a high-level summary of the recommendations made in this report. Recommendations specific to each state website are included in the state-level reports.

- We recommend that BONs continue to maintain the depth and breadth of the content on their sites.
- We recommend that BONs continue to keep the content current and timely.
- So that users can quickly orient themselves on a page and feel confident that are in the right place, we recommend that all link titles exactly match the page and heading titles to which they refer.
- We recommend that any links that may not be immediately intuitive be revised so they clearly identify the types of content that they contain.
- We recommend that to the extent possible, that the BON websites include a comprehensive FAQ section that applies to all of the main content on the website.
- We recommend that links indicate to users when files are PDFs or links to external sites so that users do not get confused or disoriented.
- We recommend that, to the extent possible, the BON pages add an easy way to go back to the homepage by adding a “BON Home” link on either the top or left navigation menus. Users will always seek an easy way to get back to the homepage.
- We recommend that text be reduced as much as possible on lengthy pages, and that the BON websites implement these enhancements, if possible:
 - Include a table of contents at top of the page so users can quickly “jump” to the content they seek on the page. In addition, most users look for links and major headings at the top of pages to find key content. Including a concise table of contents at the top of the page will help ensure that users find they content for which they are looking.
 - Highlighting major items on pages that require scrolling will help users find what they need.
 - Be sure that pages with a large amount of content are categorized and formatted with easy to read and bolded headings so users can quickly find relevant and desired information.

- Consider finding subtle ways to enhance the pages so they include more color contrast, less prose, different style headings, and images so they look more up-to-date and allow users to skim more effectively.
- We recommend, where possible, removing any links that users do not frequently access and consolidating links that may be closely related. In addition, add a small amount of white space between each link so users can skim the lists more easily.
- We recommend implementing different techniques to emphasize important text. For example, rather than using all caps, consider bolding or italicizing important text. Consider different ways to draw users' attention to important text. Likewise, if red text is used, consider using regular sentence case and only bolding important phrases to draw users' attention.
- We recommend that for those Boards that do have the ability to format their own website, to ensure that every webpage reflects a hierarchical and logical flow of visual style, including heading and font sizes. This will help the site convey a logical flow of information, appear updated, and ensure a better user experience. Moreover, it will enhance the overall visual appeal of the website since webpages that look professionally designed contribute to the overall credibility of the website.
- We recommend that the search features be programmed so they yield as many search results as possible that are relevant to the entered query so users feel confident that their search results are all inclusive. In addition, maintain the search query that the user entered. Finally, since users tend to search for simple terms, it's important that the search function be easy to use and allow for clearly successful searches based on basic search queries.
- We recommend ensuring that the alternative text provided for non-text elements include words and phrases that are descriptive. They should not be long descriptions, but they should enable someone who is hearing, rather than seeing them, to understand where the link will take them.
- We recommend ensuring that all headers are labeled as such to facilitate scanning by blind users as well as sighted users who would benefit from headers that are clearly marked.
- We recommend repairing the broken skip links and adding skip links to websites that do not already contain them.
- Because forms are often a key component on websites like these, we recommend ensuring that forms are accessible to all users, especially users with visual impairments who cannot see the form fields and may not be able to complete the forms properly.

Appendix A: List of Board of Nursing Member and Associate Member Websites

State / Province / Territory	URL
Alabama	www.abn.alabama.gov
Alaska	www.dced.state.ak.us/occ/pnur.htm
Alberta, Canada	www.clpna.com/
Alberta, Canada	www.nurses.ab.ca/
Arizona	www.azbn.gov
Arkansas	www.arsbn.org
British Columbia, Canada	www.clpnbc.org/
British Columbia, Canada	www.crnbc.ca/
California	www.rn.ca.gov
California	www.bvnpt.ca.gov
Colorado	www.dora.state.co.us/nursing
Connecticut	www.state.ct.us/dph
Delaware	http://dpr.delaware.gov/boards/nursing
District of Columbia	http://hpla.doh.dc.gov/hpla/cwp/view,A,1195,Q,488526,hplaNav,_J30661 ,_.asp
Florida	www.doh.state.fl.us/mqa
Georgia	www.sos.state.ga.us/plb/rn
Georgia	www.sos.state.ga.us/plb/lpn
Hawaii	www.hawaii.gov/dcca/areas/pvl/boards/nursing
Idaho	www.state.id.us/ibn
Illinois	www.idfpr.com/dpr/WHO/nurs.asp
Indiana	www.in.gov/pla
Iowa	http://nursing.iowa.gov

State / Province / Territory	URL
Kansas	www.ksbn.org
Kentucky	www.kbn.ky.gov
Louisiana	www.lsbpne.com/
Louisiana	www.lsbn.state.la.us
Maine	www.maine.gov/boardofnursing
Manitoba, Canada	www.crnmb.ca
Maryland	www.mbon.org
Massachusetts	www.mass.gov/dpl/boards/rn
Michigan	www.michigan.gov/healthlicense
Minnesota	www.nursingboard.state.mn.us
Mississippi	www.msbn.state.ms.us/
Missouri	www.pr.mo.gov/nursing.asp
Montana	www.nurse.mt.gov
Nebraska (both APRN board and BON)	www.hhs.state.ne.us/crl/nursing/nursingindex.htm
Nevada	www.nursingboard.state.nv.us
New Hampshire	www.state.nh.us/nursing
New Jersey	www.state.nj.us/lps/ca/medical/nursing.htm
New Mexico	www.bon.state.nm.us
New York	www.op.nysed.gov/prof/nurse
North Carolina	www.ncbon.com
North Dakota	www.ndbon.org
Ohio	www.nursing.ohio.gov
Oklahoma	www.ok.gov/nursing/
Ontario, Canada	www.cno.org

State / Province / Territory	URL
Oregon	www.osbn.state.or.us
Pennsylvania	www.portal.state.pa.us/portal/server.pt/community/state_board_of_nursing/12515
Rhode Island	www.health.ri.gov
South Carolina	www.llr.state.sc.us/pol/nursing
South Dakota	www.state.sd.us/doh/nursing
Tennessee	http://health.state.tn.us/Boards/Nursing/index.htm
Texas	www.bon.state.tx.us
Utah	www.dopl.utah.gov/licensing/nursing.html
Vermont	www.vtprofessionals.org/opr1/nurses
Virgin Islands	www.vibnl.org
Virginia	www.dhp.virginia.gov/nursing
Washington	www.doh.wa.gov/hsqa/professions/nursing/default.htm
West Virginia	www.wvrnboard.com
West Virginia	www.lpnboard.state.wv.us
Wisconsin	http://drl.wi.gov
Wyoming	http://nursing.state.wy.us

Board of Nursing Members & Associate Members Without Websites

- America Samoa
- Bermuda
- Guam
- Northern Mariana Islands

Appendix B: Task List

Task #	Task
1	Find general disciplinary enforcement / process information
2	Find recent complaints filed against nurses
3	File a complaint against a nurse
4	Determine how to verify a license
5	Find general information on nurse training and education
6	Find relevant nursing statistics and data
7	Find information about the licensure examination
8	Determine if state is a NLC (Nurse Licensure Compact) state
9	Find online services, including applications and notifications
10	Find relevant social networking links
11	Download or find meeting broadcasts / recordings
12	Determine how the BON functions
13	Find policy and position statements
14	Find rules and regulation standards information
15	Find agenda and minutes
16	Functionality of search function
17	Find contact information
18	Find Frequently Asked Questions and determine relevance
19	Find staff directory
20	Determine upcoming events / find calendar
21	Determine the latest BON news

Appendix C: List of Workgroup Participants

- David P. Burgess, Deputy Secretary for Planning and Service Delivery, Pennsylvania Department of State
- Dean Estes, IT Director, Nevada Board of Nursing
- Adrian Guerrero, IT Manager, Kansas Board of Nursing
- Adam Henricksen, IT Director, Arizona Board of Nursing
- Barbara Holtry, Communications Manager, Oregon State Board of Nursing
- Gail Marshal, Senior Systems Analyst/Programmer, North Carolina Board of Nursing
- Carl Nagin, IT Analyst III, Louisiana Board of Registered Nursing
- Erin Peterson, IT Consultant, Wyoming Board of Nursing
- Tawnya Smith, IT Manager, Texas Board of Nursing
- Matt Stevens, IT Administrator, Arkansas State Board of Nursing



Memorandum

TO: Texas State Board of Nursing
FROM: Concord Evaluation Group, LLC
DATE: March 23, 2011
RE: Texas State Board of Nursing Website (www.bon.state.tx.us) Usability Review Report

Overview

CEG found the Texas State Board of Nursing website (<http://www.bon.state.tx.us/>) to be a usable, visually appealing, and easy-to-navigate website. CEG found that the website effectively categorized a large amount of complex information in an intuitive information architecture.

Overall, the site appeared to be appropriately geared to its intended audience. This is often the most important component of any information resource.¹ In addition, the site's overall purpose seemed clear to the reviewer.

The biggest strength of the website was the ability for users to skim the links for key content using the left navigation menu. Moreover, the main links that appeared after clicking the left navigation menu appeared to be appropriately geared to the correct audiences.

In fact, at no point during completing the tasks did the reviewer feel lost or unsure where to navigate or feel like any important content was missing from the site. In addition, the site was clearly kept up-to-date and its visual design added this perception.



Figure 1. The intuitive and easy-to-use left navigation menu.

¹ Asher, 1980; Badre, 2002; Baldwin, Peleg-Bruckner and McClintock 1985; Celsi and Olson, 1988; Evans, 1998; Levine, 1996; Nielsen and Tahir, 2002; Nielsen, 1997b; Nielsen, 2000; Rajani and Rosenberg, 1999; Sano, 1996; Sinha, et al., 2001; Spyridakis, 2000; Stevens, 1980

Nonetheless, CEG found a number of usability issues that the Texas BON could address to enhance the overall user experience of the website. The task completion checklist and overview of usability issues follow.

User Task Completion Checklist

The following table indicates which content the reviewer was able to find without difficulty, with some difficulty, or was unable to find. The key usability strengths and issues uncovered during the process of completing these tasks follow in the next section.

Task Completion Checklist

	Task Completed without Difficulty	Task Completed with some Difficulty	Task not Completed
Find general disciplinary enforcement / process information	✓		
Find recent complaints filed against nurses	✓		
File a complaint against a nurse	✓		
Determine how to verify a license	✓		
Find general information on nurse training and education	✓		
Find relevant nursing statistics and data	✓		
Find information about the licensure examination	✓		
Determine if state is a NLC (Nurse Licensure Compact) state	✓		
Find online services, including applications and notifications			✓
Find relevant social networking links	✓		
Download or find meeting broadcasts / recordings	✓		
Determine how the BON functions	✓		
Find policy and position statements	✓		
Find rules and regulation standards information		✓	
Find agenda and minutes		✓	
Functionality of search function	✓		
Find contact information			✓
Find Frequently Asked Questions and determine relevance	✓		
Find staff directory		✓	
Determine upcoming events / find calendar	✓		

Usability Findings

Conceptual Model

- Finding:** The reviewer was unable to find that an overarching Frequently Asked Question page. This was problematic when he assumed the persona of a novice user, who might be unsure of how the BON functioned and what the different terminology meant.
- Recommendation:** Similar to what was done with the Verifications and Licensing FAQ section, consider creating a larger FAQ section that applies to all of the main content areas on the page. Users new to the site would likely benefit from an all-inclusive FAQ page.²

Navigation

- Finding:** While the reviewer encountered no difficulty finding information, it wasn't always immediately intuitive how to return to pages he had previously visited. This is probably due to the lack of a standard top navigation menu. While the inclusion of the images on the homepage were visually pleasing, it dominated the page, making the links on the top left of the page harder to notice. The reviewer found that he became overly reliant on the left navigation menu and subpages given their placement on the page in relation to the top navigation links. We will explore this issue further in usability testing.



Figure 2. The seemingly hidden top menu links.

- Recommendation:** Consider reducing the size of the first row of pictures above the Texas Board of Nursing heading so they are the same size as the second row of pictures. This will result in the images occupying less space on the page, thereby making the top menu links more noticeable and likely resulting in the user becoming less reliant on the left navigation menu. In addition, consider bolding the top menu items to further ensure that they stand out on the page. Finally, consider adding a Home button within the left navigation menu, too, so users can quickly navigate back to the home page should they

² Fogg, 2002; Fogg, et al., 2001; Lightner, 2003; Nielsen, 2003.

need to. Users have an easier time navigating a website if they have a quick way to navigate back to the homepage.³

- Finding:** Sometimes, when the reviewer attempted to move his cursor into the pop-up window corresponding to the left navigation menu item, he mistakenly navigated out of the window. As indicated in the figure below, if the user moved his / her cursor outside of the area shaded in red, the adjacent pop up window changed to either the immediate top or immediate bottom left navigation menu item, whichever direction the user moved his / her cursor. This presented a problem because most users will probably not be so careful as to keep their cursor within the confined area as shaded below. For example, if a users were looking for Approved Programs in the example below, they would probably move their cursor outside of the red shaded area, resulting in the window disappearing.



Figure 3. The seemingly hidden top menu links.

- Recommendation:** If possible, code the page so that users have more leeway in where they can move their cursor so their intended pop up window does not change.

Functionality

- Finding:** It wasn't immediately clear to the reviewer if the search function worked properly. For example, when he searched "Latest News" the searched yielded no results. But, when he searched "News" the search yielded a large number of results. This is a potential user experience issue because many users will search specific terms to find specific content. In addition, after the reviewer searched "News" there was no indication on the search results page what his search query was. It is important to maintain the search query so that users do not have to rely on memory and are confident that they searched correctly.
- Recommendation:** Since users tend to search for simple terms, like the reviewer did when he searched for "News," it's important that the search function be easy to use and allow for clearly successful searches based on basic search queries.⁴

³ Bailey, 2000b; Detweiler and Omanson, 1996; IBM, 1999; Levine, 1996; Lynch and Horton, 2002; Nielsen and Tahir, 2002; Spool, et al., 1997; Tullis, 2001.

⁴ Bailey and Koyani, 2004; Bayles and Bernard, 1999; Koyani and Nall, 1999; Nielsen, 2001a; Nielsen, et al., 2000; Pollock and Hockley, 1996; Spink, Bateman and Jansen, 1999; Spool, Schroeder and Ojakaar, 2001.