

NCSBN FY2020-2022 Research Agenda (26 Projects)

Introduction

The goal of the research department at NCSBN is to advance the science of nursing regulation; generate valid, and reliable evidence that assists BONs in policy and decision-making; and heighten the safety and protection of the public.

The NCSBN research agenda aligns with NCSBN's strategic plan, mission and vision and describes the broad areas of regulation that NCSBN wishes to focus on, and direct international attention to, over the next three years.

NCSBN Research Strategies for FY2020-2022:

1. Identify gaps in scientific evidence around nursing regulatory issues while building on past studies and recent findings to generate new knowledge that supports the work of nursing regulatory bodies and protects the public.
2. Develop robust performance and competency measures that help boards of nursing achieve operational excellence and efficiency in protecting the public.
3. Facilitate the generation and translation of data to develop nursing policy, guidelines and regulations.
4. Partner with pre-eminent scientists and universities globally to extend our capability and disseminate results.

The FY2020-2022 Research Agenda incorporates requests for evidence from NCSBN members and reflects outcomes from the NCSBN Regulation 2030 conference. Based on the types of evidence desired, NCSBN research programs will continue to include experimental and quasi-experimental designs, systematic reviews, multi-center studies, and surveys in collaboration with BONs, stakeholders, and centers of academic excellence. To supplement NCSBN's internal research department, external investigators are invited to submit proposals, which align with our priorities, for funding, through the CRE Grant Program.

Current and Planned Studies

Strategic Initiative A. *Promote agile regulatory systems for relevance and responsiveness to change.*

Board Efficiency and Effectiveness

NCSBN research focuses on identifying robust performance measures and cost effective strategies that help boards of nursing achieve operational excellence and efficiency in protecting the public. In an era of increased scrutiny of regulation and financially constrained environments, BONs will be increasingly requested to demonstrate their efficiency and effectiveness in carrying out their responsibilities. NCSBN efforts will continue to support BONs in responding to demands for transparency and objective data about regulatory performance.

Discipline Efficiency Study. This pilot study currently underway involves nine BONs and takes performance measurement to the next level as the team objectively analyzes the efficiency and

effectiveness of the complaint intake, investigative and reporting processes of each participating BON. These data should lead to the development of best practices that can be shared across nursing regulatory bodies both in the US and abroad. It should provide useful data for the first strategic objective under this initiative which is the development of a regulatory excellence accreditation system.

Board Structure Analysis: A Comparative Study of Umbrella and Independent Boards.

This study will analyze the timing of board actions. Specifically, the study will compare umbrella and independent boards and determine if a certain board structure is more agile and therefore efficient in rendering decisions (e.g. discipline).

Substance Use Disorder (SUD) and Discipline

Discipline of nurses continues to consume a majority of BON time and resources, with SUD being the foremost challenge. NCSBN has undertaken and continues to pursue inquiry into the issues related to this disorder. Early and effective evidence-based intervention are imperative for lasting recovery and return to work.

Guidelines for Monitoring Substance Use Disorder in Nurses. A Longitudinal prospective study that builds upon the outcomes of the *Alternative to Discipline (ATD)/Monitoring Program Study*. Eight BONs will adopt the Monitoring Program Guidelines and through ongoing data collection, the performance of the programs and participant outcomes will be assessed and measured. The final result will be evidence-based guidelines for SUD ATD and monitoring programs.

It is hoped that both disciplined and non-disciplined nurses can be enrolled in the monitoring programs to enable further inquiry. One sub-analysis will be to explore whether discipline enhances, hinders or has no affect on outcomes.

In addition, we continue to explore and learn from disciplinary cases to better understand and predict which nurses may be at risk and how best to shift our focus to a risk-based framework and right touch regulation.

Discipline and APRNs. An analysis of the types of discipline and possibly the closed case claims of APRNs. A planned sub-analysis is to examine the violations and cases experienced during the first two years in practice.

Nurses at Risk. Through the use of Nursys data we will explore risk factors for errors and discipline. A retrospective longitudinal analysis of discipline data will be conducted to determine whether the nurses with encumbered licenses pose additional risk of harm to public safety and identify the predictors for recidivism. In addition, the efficacy of board disciplinary actions will be evaluated.

Nursing Education

An important role of the BON is to oversee the nursing education programs in their state. Evidence-based standards for nursing education are imperative to assist BONs, nursing education programs and ensure public protection.

Pre-licensure Nursing Program Database. One outcome of the *Nursing Education Metrics and Outcomes Study* was the development of a data collection tool for BON annual reports. This tool, when implemented by BONs will produce consistent and uniform data collection from nursing education programs throughout the US. The plan is for the data to be entered into a central nursing education database for comprehensive analysis and understanding of trends and the performance of pre-licensure programs.

Simulation Utilization Growth: Secondary data review of state laws & statutes to see how regulation of the use of simulation in nursing education programs has changed since 2014. This is a follow-up to a baseline study conducted just prior to the landmark 2015 Simulation Study.

Nursing Education Program COVID-19 Cohort Study: Nationwide longitudinal survey of nursing programs to compare program characteristics, with a particular focus on clinical education format, and student experience through early career. This study will identify trends within nursing education, current practice, and student experience. It is also intended to extend into students' immediate post-graduate and early career experiences.

Simulation Education Study 2.0: Using preliminary data from the Nursing Education Program COVID-19 Cohort Study, this prospective randomized study will recruit up to 5 nursing programs to examine different levels of simulation utilization. Building on the landmark 2015 study, this analysis will explore simulation clinical experiences up to 100%.

Strategic Initiative B. *Champion regulatory solutions to address borderless health care delivery.*

APRN Consensus Model

Information on the consequences of state restrictions on APRN practice is critical to getting legislation related to the APRN Consensus Model passed and subsequently allowing states to be eligible to pass the APRN Compact. Data is needed on the social and economic impact of removing barriers to full practice for APRNs. While confirmation of the high quality of care and positive patient outcomes attributed to APRNs continues to grow, additional evidence can reinforce the safety and benefits of full practice authority for APRNs.

Examining the Utility of APRN Collaborative Practice Agreements: The Physician's Perspective. This is a sequel to our published study on the Economic Barriers of Collaborative Practice Agreements. A gap in knowledge, that has not been studied, is the physician's perspective of the collaborative practice agreement. Besides monetary benefits, what do they see as both the advantages and barriers to the collaborative practice agreement?

Access in Medically Underserved Areas: Drawing upon a survey of APRNs involved in a collaborative practice agreements, this is a cross-sectional study examining the difficulties encountered by APRNs practicing in whole and partial HPSA (Health Professional Shortage Area) counties. Initial findings demonstrate APRNs in whole and partial HPSA are more likely to have multiple agreements, encounter

more difficulties maintaining their collaborative agreement, and often resort to constructing their own agreements. In addition, more chart reviews, and higher fees are often assessed to APRNs in HPSA counties, relative to those in non-HPSA areas.

Nurse Practitioners Expanded Access to Health Care for Medicare Beneficiaries, Particularly in Rural Areas. This study provides a descriptive first look at primary care accessibility and utilization levels during the present high growth period (2014 to 2017) for the NP workforce, with an emphasis on rural areas among Medicare beneficiaries. The number of NPs and PCPs who were actively practicing and the number of Medicare patients they served during this period are the primary population of interest.

Impact of COVID-19 Waivers on Nurse Practitioners & Expanded Access to Health Care for Medicare Beneficiaries, Particularly in Rural Areas. This study will take a difference-in-differences (DID) approach to examine the Medicare beneficiary patient outcomes in states that adopted COVID-19 waivers, particularly for rural and primary-care shortage based providers. The number of beneficiaries, and their associated demographic characteristics will be examined longitudinally, prior the coronavirus (COVID-19) pandemic and during to examine how NP changed as result of COVID-19 waivers.

National Hospital Ambulatory Medical Care Survey (NHAMCS) Analysis. A comparison of physician and APRN practice patterns across the U.S. using the National Hospital Ambulatory Medical Care Survey (NHAMCS). Study will examine geographic and payer status trends among patients that receive care managed by APRNs v. physicians.

APRN COVID-19 Waiver Impact Cohort Study: Examine impact of emergency orders to waiver certain aspects of supervisory agreements between APRNs and MDs. Comparative analysis using like profile jurisdictions to examine issues of access, telehealth, required fees, and expansion into underserved areas.

The Nurse Licensure Compact

The Nurse Licensure Compact (NLC) is a regulatory solution to the growing demand for borderless health care delivery. This project is a major initiative for states joining the NLC and given the investment in terms of staff time and resources, it is important to measure outcomes, especially in the implementation phase of the project. Data collected can then be used to enhance legislative and implementation strategies for future adopters.

The Economic Impact of the Nurse Licensure Compact on Newly Adopting States. Data collection templates are distributed to US BONs adopting the NLC for the first time. The boards are asked to report all expenditures incurred from the enactment and implementation of the NLC, including any loss of revenue from licensure fees to new expenses related to increased staffing needs or a higher number of discipline cases.

Can the NLC Improve Staffing Ratios and thus, Decrease Patient Mortality? Dr. Linda Aiken is a leading health services researcher known for her studies examining the effects of staffing ratios on patient mortality rates. One consternation regarding her work is that there are not enough nurses to equitably

supply staffing ratios. The NLC and its ability to increase nurse mobility may be the answer. NCSBN is partnering with Dr. Aiken and the team at the University of Pennsylvania to study these phenomena.

Staff Ratios, Nurse Experience, Patient Safety/Access, and COVID-19: A continuation of NCSBN's partnership with Dr. Linda Aiken (University of Pennsylvania) examining the effects of staffing ratios and license portability in light of the COVID-19 pandemic.

The Multistate License. The NLC Commission has requested NCSBN conduct a study about the NLC, specifically focusing on how nurses use their multistate license (MSL) and their satisfaction with it. Four questions, requested by the commission, pertaining to nurses and the MSL, have been added to the 2020 National Nursing Workforce Survey.

Additional Projects related to Licensure, Public Protection, and the Mission and Vision of NCSBN

Nursing Workforce

Increased global leadership in regulation will require accurate workforce data at state and national levels. NCSBN will continue to provide nursing regulatory bodies and stakeholders with high quality data that can be used for research, workforce planning, understanding of workforce trends and enhanced communication of workforce needs between jurisdictions.

National Nursing Workforce Survey. Every other year, NCSBN conducts the national nursing workforce survey of nurses in the U.S. This is currently the primary source for national supply-side data and is the only national survey specifically focused on nurses including LPN/VNs. The next National Nursing Workforce Study is targeted to begin in January 2020 and again in 2022 in collaboration with the National Forum of State Nursing Workforce Centers.

Nursing Workforce Data Sub-Analyses will include papers on the following:

- What is the general makeup of the APRN workforce in terms of diversity, types of settings and location of services in 2020?
- Where are nurses working? What are the shortage areas? These questions can be explored through the development of population heat maps.
- Do higher education and licensure requirements affect the diversity of the workforce?
- What are the faculty workforce trends?
- What are the primary work settings, including telehealth, for the nursing workforce in 2020?
- How do individual state workforce supply data compare to data from the 2020 National Nursing Workforce Survey?

COVID-19 Nurse Workforce Tracking: NCSBN's research department is engaged in ongoing longitudinal tracking of COVID-19 nurse infection and death rates. This tracking also broadly captures general state-level metrics surrounding confirmed cases and deaths from the onset of the pandemic.

Patient Safety

It is reported that at a minimum, 100,000 patients a year die from a healthcare-related error. For almost 20 years NCSBN has been seeking a better understanding into the root causes of nursing error. With the employment of newer technologies and statistical methods NCSBN will continue to pursue this important avenue of research.

The National Nursing Safety Study. This study is a sequel to TERCAP and will take our understanding of nursing error to a higher level helping us identify individual and system level barriers negatively impacting patient safety and the quality of care. We are beginning with a pilot study to test our methods and instruments. We will be able to analyze both structured and unstructured data elements to inform instrument refinement and we anticipate a full study launch with the recruitment of hospitals from across the country in 2022.

NCLEX

NCLEX data serves as a rich repository for NCSBN to explore and learn more about outcomes and risk-factors.

Do Repeat NCLEX Takers have Higher Rates of Discipline? This will be a secondary data analysis that will examine possible correlation between the number of times a candidate takes the NCLEX and disciplinary actions. Mixed model approach will be used incorporating program-level effects using matched pairs to isolate and quantify impact of repeat test takers and professional discipline (defined by specific time periods).

Global

In alignment with the vision of NCSBN to lead regulatory excellence worldwide, the research department will be extending its focus to worldwide regulatory issues and partnering, when possible, with regulators across the globe.

Global Regulatory Structures & Health Outcomes. Using the *Global Regulatory Atlas* the study will use a comparative secondary analysis approach to assess aggregate health outcomes data, adjusting for select economic and demographic indicators, across countries with different regulatory frameworks.

AEDP Canadian Survey. This project is currently in progress. NCSBN is partnering with the College of Nurses of Ontario and British Columbia College of Nursing Professionals to examine adverse event reporting protocol among Canadian nurse leaders and to pilot the Adverse Event Decision Pathway (AEDP). Data collection is closed and data analysis is scheduled for spring 2020.

Global Regulatory Atlas Waiver Study: This study is in the early stages, and seeks to examine how changes made by nursing regulatory boards (NRB) around the world during the coronavirus pandemic have impacted health-related outcomes. The proposed study is detailed below. Primarily, NCSBN seeks to understand: (a) what temporary or permanent policy changes did NRB implement to overcome the Coronavirus pandemic? (b) What factors related to the NRB regulatory framework allowed these changes to be made? (c) How have these changes contributed toward jurisdictions' success combatting the virus.

Secondary research questions are related to (a) changes in telehealth practices, (b) the impact of regulatory structure on efforts (i.e. independent or umbrella NRB) and (c) how neighboring jurisdictions' coronavirus-related policy compare to one another.