OUTLINE

- BACKGROUND
- COHORT STUDY
- SURVEY RESPONSE
- RESULTS
- CONCLUSION
In 2010 a survey was sent out to all prelicensure RN programs to assess the prevalence and practice of simulation.

Findings from the study were used in the design of the National Simulation Study.

In 2017 a follow-up study was conducted which replicated the methodology of the 2010 survey and updated the questionnaire to include questions about the NCSBN simulation study and guidelines.
PURPOSE

- Describe the current state and use of simulation in prelicensure programs including LPN/VN programs
- Compare the 2017 findings to the 2010 results and describe any changes
- Determine the use and impact of the simulation study and guidelines
Survey sent via mail to all prelicensure education programs

Same survey as in 2010 with added questions to determine the impact of the Simulation Study and Guidelines.

2017 Survey included LPN/VN programs.

Multiple mailings with a reminder postcard.
1,060 useable surveys were returned in 2010 for a response rate of 62.2%

902 useable surveys were returned in 2017 for a response rate of 28.3%

Surveys were mailed in 2017 out to both RN and LPN/VN licensure programs

For the Cohort Study 380 nursing programs were identified as participating in both surveys

The trends seen in the cohort study were the same as those seen in the overall study
In order to confirm that trends found in the overall study were not due to differences in the composition of the data samples collected in 2010 and 2017 a cohort study was conducted.

Nursing programs that participated in both the 2010 and 2017 surveys were identified as a cohort group and tables comparing the two surveys were recreated using only the data that cohort.
2017 SURVEY

(INCLUDED LPN/VN PROGRAMS)

TYPES OF NURSING PROGRAMS OFFERED

- LPN/VN
- Associate Degree
- Baccalaureate Degree
- Diploma
- Postlicensure Masters Degree

2010 (n=1,049) vs. 2017 (n=865)
SLIGHT INCREASE IN PROPORTION OF RESPONSES FROM COMMUNITY COLLEGES AND TECHNICAL SCHOOLS
SLIGHT INCREASE IN PROPORTION OF RESPONSES FROM PROGRAMS IN RURAL AREAS

GEOGRAPHIC SETTING

- Urban/Metropolitan area
- Suburban area
- Rural area

2010 (n=1,038)  2017 (n=886)
RESULTS

MEDIAN NUMBER OF CLINICAL HOURS HAS DECREASED SINCE 2010

TOTAL NUMBER OF CLINICAL HOURS BY SURVEY YEAR – 10TH, 25TH, 50TH, 75TH, AND 90TH PERCENTILES
RESULTS

COHORT STUDY ALSO SHOWS MEDIAN NUMBER OF CLINICAL HOURS HAS DECREASED

COHORT STUDY: TOTAL NUMBER OF CLINICAL HOURS BY SURVEY YEAR – 10TH, 25TH, 50TH, 75TH, AND 90TH PERCENTILES
RESULTS

USE OF HIGH FIDELITY SIMULATION HAS INCREASED IN ALL COURSES

HIGH FIDELITY SIMULATION USE BY COURSE IN PROGRAMS THAT EMPLOY SIMULATION

- Foundations
- Health Assessment
- Medical/Surgical
- Advanced Med/Surgical
- Obstetric
- Pediatric
- Gerontological
- Mental Health
- Community/Public Health
- Capstone/Role Transition

2010 (n=917)  2017 (n=772)
RESULTS

THE LPN/VN COURSES USING THE MOST HIGH FIDELITY SIMULATION ARE COMPARABLE TO THOSE IN RN PROGRAMS

HIGH FIDELITY SIMULATION USE BY COURSE IN LPN/VN PROGRAMS THAT EMPLOY SIMULATION (N=286)
RESULTS

SIMULATION LABS ARE BEING USED SLIGHTLY LESS OFTEN TO PRACTICE ROUTINE ASSESSMENTS, BUT MORE OFTEN TO PRACTICE RARE PATIENT SCENARIOS

LEARNING OPPORTUNITIES OFFERED BY SIMULATION LAB

- Practice procedures
- Practice routine assessments
- Practice patient scenarios
- Practice rare patient scenarios
- Practice high-risk patient scenarios
- Remediation of skills
- Other learning opportunities

2010 (n=952)  2017 (n=900)
RESULTS

REPORTS THAT RIGHT AMOUNT OF SIMULATION IS BEING USED HAVE INCREASED

OPINIONS ABOUT AMOUNT OF SIMULATION USED IN NURSING PROGRAMS

- More simulation should be used
- Right amount of simulation used
- Less simulation should be used

2010 (n=907) vs 2017 (n=861)
RESULTS

PROGRAMS REPORT FEWER BARRIERS TO USING SIMULATION

BARRIERS TO THE MORE SIMULATION BEING USED BY PROGRAMS NOT USING THE RIGHT AMOUNT

- Faculty training in writing scenarios
- Time for faculty to write scenarios
- Faculty training in debriefing
- Faculty training in facilitation
- Staffing to run simulations
- Scheduling time in lab
- State Nurse Practice Act
- Other barriers

2010 (n=740) | 2017 (n=576)

Graph shows the percentage of programs reporting barriers to the use of simulation.
RESULTS

LPN/VN PROGRAMS REPORT SIMILAR BARRIERS TO RN PROGRAMS

BARRIERS TO INCREASING SIMULATION USE -- LPN/VN (N=346)

- More faculty need to be trained in writing scenarios
- Faculty do not have enough time to write scenarios
- More faculty need to be trained in debriefing simulations
- More faculty need to be trained in facilitating simulations
- Not enough staff to run the simulation controls
- Difficult to schedule additional time in the simulation lab
- State Nurse Practice Act and/or rules/regulations
- Other
RESULTS

SIMULATION HOURS ARE INCREASINGLY BEING SUBSTITUTED FOR CLINICAL HOURS

DOES STUDENT TIME IN SIMULATION COUNT TOWARDS CLINICAL HOURS?

- No, simulation is a supplement to clinical hours
- Yes, on occasion simulation is substituted for clinical
- Yes, simulation hours are substituted for clinical hours

2010 (n=878) 2017 (n=852)
RESULTS

INCREASE IS OCCURRING ACROSS ALL COURSES

PERCENT OF PROGRAMS SUBSTITUTING SIMULATION HOURS FOR CLINICAL HOURS

- Foundations
- Health Assessment
- Medical/Surgical Nursing
- Advanced Medical/Surgical Nursing
- Obstetrical Nursing
- Pediatric Nursing (infants-adolescents)
- Gerontological Nursing
- Mental Health Nursing
- Community/Public Health Nursing

2010 (n=589) vs 2017 (n=574)
RESULTS

PROGRAMS WOULD SUBSTITUTE FOR UP TO 50% CLINICAL HOURS IF ALLOWED

MAXIMUM PERCENT OF HOURS PROGRAM WOULD SUBSTITUTE IF ALLOWED

10% Quantile 25% Quantile Median 75% Quantile 90% Quantile

2010 (n=731) 2017 (n=847)
RESULTS

ABOUT HALF OF ALL FACULTY RECEIVE FORMAL TRAINING IN ASPECTS OF SIMULATION

PERCENT OF FACULTY RECEIVING FORMAL TRAINING (N=902)

- Running simulation scenarios: 60.0%
- Programming manequins: 50.0%
- Conducting debriefings: 60.0%
RESULTS

MOST PROGRAMS ARE FAMILIAR WITH THE SIMULATION STUDY AND GUIDELINES

FAMILIARITY WITH NCSBN SIMULATION STUDY AND GUIDELINES

- Familiar with results of NCSBN Simulation Study
- Familiar with NCSBN Simulation Guidelines

All Programs (n=871) vs. LPN/VN (n=343)
THE NCSBN SIMULATION STUDY AND SIMULATION GUIDELINES EACH PLAYED MAJOR ROLES IN CHANGING POLICY REGARDING USE OF SIMULATION

WHY WERE POLICY CHANGES MADE? (N=204)
ABOUT HALF OF THE PROGRAMS HAVE ADOPTED AT LEAST PART OF THE NCSBN SIMULATION GUIDELINES
CONCLUSIONS

- The evolving educational landscape is revealed to have more acceptance of the usage of simulation than what was present in 2010.

- There is increased usage of high fidelity simulation across all types of programs and courses while barriers to the usage of simulation are in decline.

- The NCSBN Simulation Study and Simulation Guidelines have both had an impact on the regulation of simulation and knowledge of each is widespread among the programs.