WEST VIRGINIA
BOARD OF REGISTERED NURSES

STATE OF NURSING EDUCATION REPORT

BASED ON THE NCLEX-RN PRE-LICENSURE NURSE EDUCATION PROGRAM SURVEY

2023 EDITION

NURSING EDUCATION REPORT

EXECUTIVE SUMMARY

West Virginia (WV) NCLEX-RN pre-licensure nurse education programs continue to increase to meet WV registered nurse practice needs.

In August 2018 there were 43 total programs (18 baccalaureate and 25 associate) compared to August 31, 2023 when there were 72 total programs (24 baccalaureate and 48 associate), a 67.44% change increase in Board approved prelicensure registered nurse education programs in 5 years. The annual NCLEX-RN pre-licensure nurse education programs survey was sent to 70 programs on August 1, 2023. A total of 25 WV higher education schools with 69 of 70 nurse education NCLEX-RN programs in existence on September 1, 2023 participated in the online 2023 West Virginia pre-licensure NCLEX-RN annual survey. The response rate was 98.57%.

The following needs were identified:

- Need for more certified simulation faculty.

- Need for more accredited simulation centers.

- Need for more graduate-prepared faculty.

- Need for more Paramedic to ADN, LPN-ADN, Accelerated ADN and Accelerated BSN programs.

- Need for development of program administrators and faculty.

- Need for innovation in student recruitment, remediation and retention initiatives.

PURPOSE AND METHODOLOGY

The purpose of this survey is to collect annual report data from all West Virginia pre-licensure nurse education programs. It provides an overview of the current state of nursing education in the state and offers valuable insights into trends for nursing workforce stakeholders.

The survey was constructed from statistically identified quality indicators and warning signs based on results of a large mixed-method research study of US prelicensure nursing programs conducted by the National Council of State Boards of Nursing, which included an integrative literature review; a national Delphi study with educators, regulators and those who practice with new graduates; a five-year quantitative study of NRB Annual Report data; and a five-year qualitative study of NRB site visit documents.

The survey was administered using Qualtrics software (Qualtrics, Provo, UT). The WV RN Board distributed the survey link to each of its prelicensure nursing programs for completion. Each nursing program was allowed 30 days to complete the survey. After all nursing programs submitted their surveys the survey was closed. NCSBN reviewed and verified the data and compiled an aggregate report of this data.

PROGRAM DEMOGRAPHICS

During the 2022-2023 academic year, 77% (53) of WV nursing programs were nationally accredited and 23% (16) were non-nationally accredited.

Accreditation status trend

■ Not Fully Accredited   ■ Fully Accredited
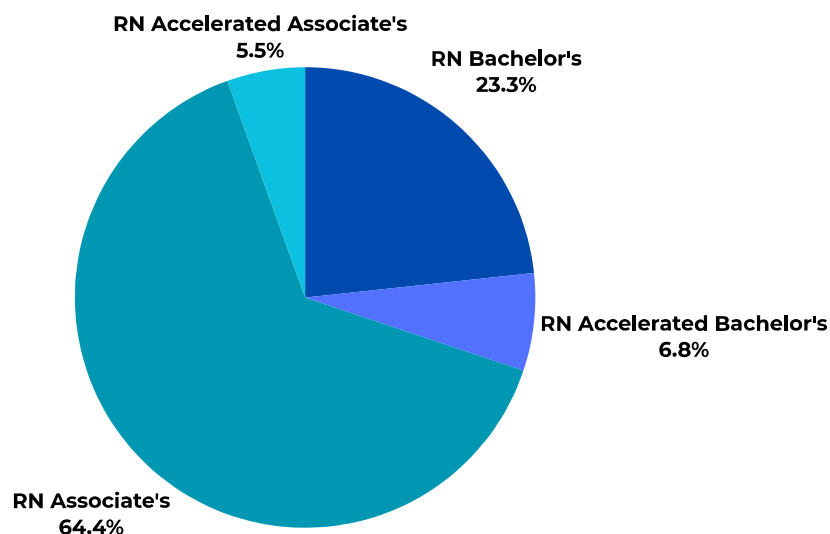
Accreditation percentage
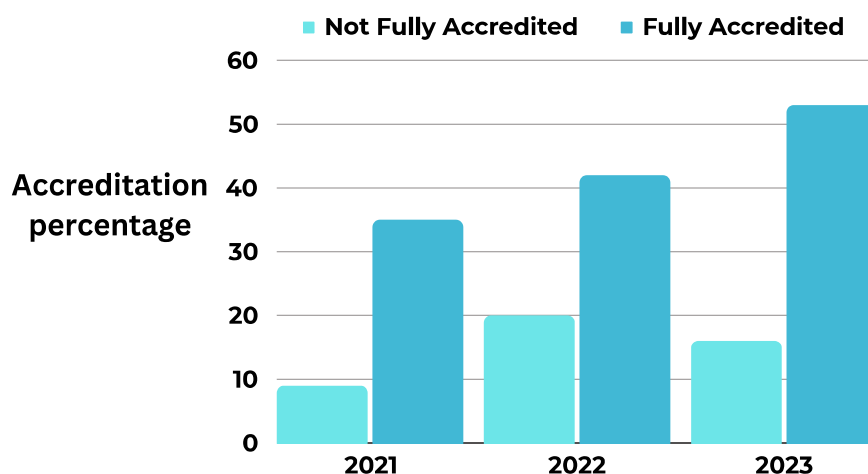
All 16 of the non-nationally accredited programs were younger than 7 years. Regulatory guidelines and evidence-based quality indicators for nursing education report programs younger than 7 years as high risk programs that may need additional oversight (Spector et. al., 2020). The West Virginia Board of Registered Nurses oversees new nursing education programs pursuant to its legislative mandates. This helps ensure that West Virginia's new nursing programs are monitored and given assistance while they are in the process of obtaining national accreditation. The locations of nursing education programs show that a plurality of programs are located in rural areas (43%), followed by urban (28%), and suburban (29%). Geographic location is a self-identified variable and was decided by individual institutional respondents.

PROGRAM DEMOGRAPHICS

A majority of nursing programs in West Virginia are public institutions (59%; N=41), followed by private for-profit (22%; N=15), and private not-for-profit institutions (19%; N=13). When looking at types of programs, a majority are from associate degree granting institutions (65%; N=41). Nationally, The Robert Wood Johnson Foundation through its Future of Nursing reports has set national goals of increasing the amount of BSN nurses across the country.

RN Accelerated Associate's
5.5%

RN Bachelor's
23.3%

RN Accelerated Bachelor's
6.8%

RN Associate's
64.4%

55% (N=38) of programs report experiencing major organizational changes within the past year. The major changes experienced included new university leaders, economic efficiencies/budget reductions, collapsing programs, new assistant/associate directors, and other non-explained changes.

CURRICULUM AND THE CLASSROOM

A slight majority of programs (50.7%; 35) indicate their students are engaged in hybrid clinical experiences. Hybrid is defined as a program that combines elements of online learning and traditional in-person learning.

**In-Person Only
49.3%**

**Hybrid
50.7%**
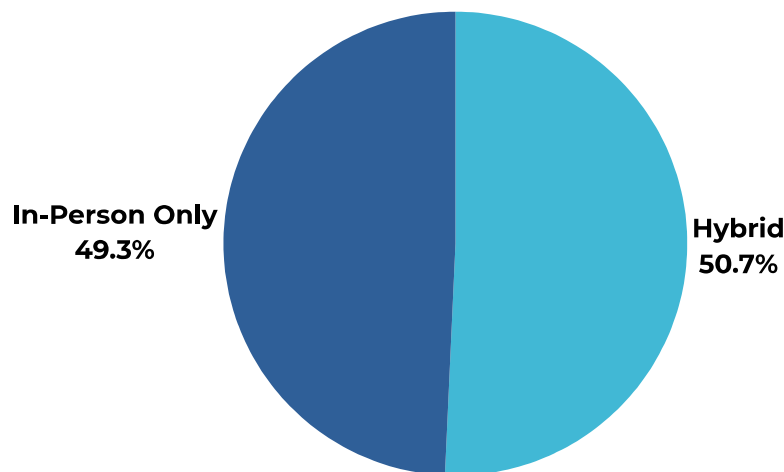
The majority of programs report utilizing semesters to divide coursework (74%; N=51), followed by quarters (14%; N=10), trimesters (9%; N=6), and other schedules (3%; N=2). Those who responded "other" utilized a time block schedule.

100% of programs report they utilize simulation techniques in their programs. Simulation is defined as a technique creating a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain an understanding of systems or human actions (Lioce et al., 2020).

12% of programs report having simulation faculty certified in healthcare simulation education by the Society for Simulation in Healthcare (SSH). Only 3% of programs report that their simulation lab is accredited by SSH.

CURRICULUM AND THE CLASSROOM

The largest percentage of programs (40.6%; 28) indicate their students are engaged in clinical experiences providing direct patient care between 401-600 hours. The median direct patient care hours required by programs was 500 hours.

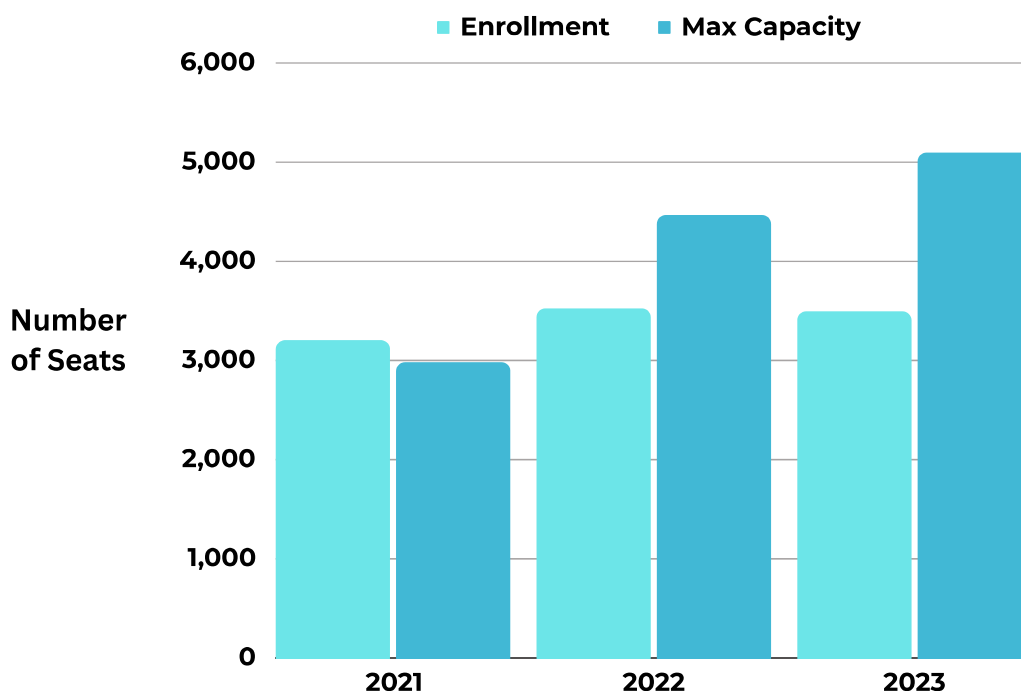## Programs Engaged in Clinical Experiences by Hours
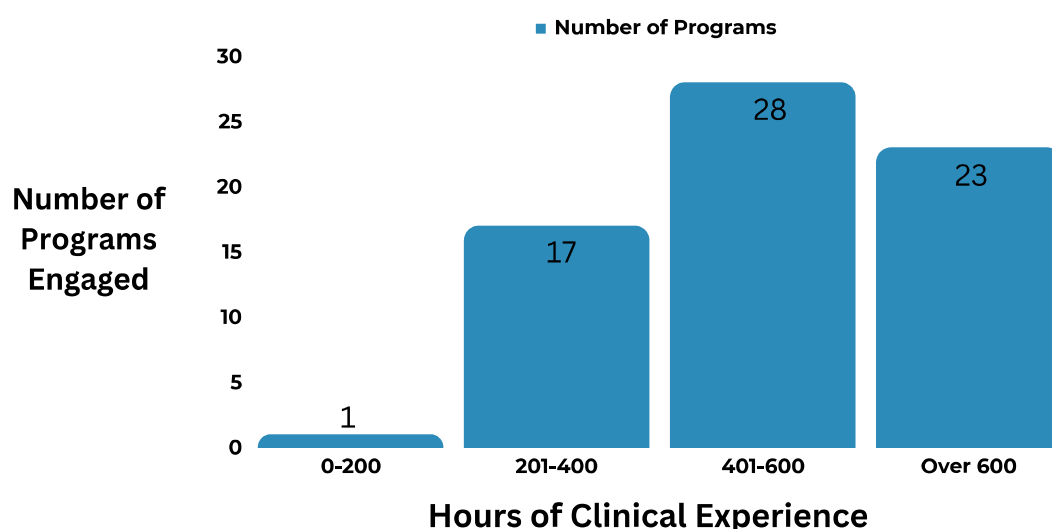
Student-to-faculty ratios for both didactic and clinical courses varied among programs. A majority of programs indicate their didactic courses had 16-30 students per faculty (51%; N=35), followed by 0-15 students per faculty (16%; N=11), and over 30 (32%; N=22). Overall, the median didactic faculty to nurse ratio was 24. Clinical faculty to student ratios ranged from 4 to 10 students per faculty member. Overall, the median clinical faculty to student ratio was 8.

100% (69) of programs report having a systematic evaluation plan in place for curriculum. Curriculum evaluation includes creating a systematic process of measurable outcomes based on standards and best-practice evidence, data collection at planned intervals, reporting of findings, and analysis for maintenance or needed changes to improve or exceed outcomes.

STUDENT DEMOGRAPHICS

**3,496 SEATS FILLED
5,096 SEAT CAPACITY**

Enrollment vs Capacity

■ **Enrollment**   ■ **Max Capacity**

Number of Seats

(Bar chart showing Enrollment vs Max Capacity for years 2021, 2022, and 2023. Y-axis "Number of Seats" ranges from 0 to 6,000 in increments of 1,000. 2021: Enrollment ~3,200, Max Capacity ~2,950. 2022: Enrollment ~3,500, Max Capacity ~4,450. 2023: Enrollment ~3,450, Max Capacity ~5,100.)

The total number of students reporting by responding programs as enrolled across all WV pre-licensure programs at the beginning of the 2023-2024 academic year was 3,496. Due to the timing of this survey, the total enrollment figure may not capture the total number of students for their fall term. Data collected in subsequent years will capture total enrollment for programs who had not yet finished their admissions process at the time of this survey. Statewide, 87% (60) programs report having a maximum enrollment capacity. The maximum enrollment capacity reported across all pre-licensure registered nursing programs in the state is 5,096. A total of 9 of 69 programs report they do not have a maximum enrollment capacity. Those programs without maximum enrollment are not included in the total for maximum enrollment. The difference across all WV pre-licensure NCLEX-RN programs between maximum enrollment capacity and student enrollment numbers reveals there are 1,600 unfilled seats.

STUDENT DEMOGRAPHICS

87%
of respondents report
maximum enrollment
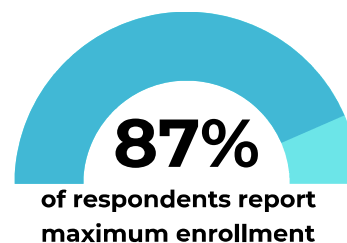
Since total enrollment does not only include entering cohort data, these unfilled seats do not represent unfilled first year seats in pre-licensure programs but include seats for students who are enrolled at different levels within nursing programs and fail to complete those programs and those who graduate throughout the academic year. Analyzing the data further, the following was found:

- 18 new pre-licensure programs were approved in 2022 reported zero student enrollment on this survey. This was most likely the result of the timing of this survey being before they completed their admissions processes.
- One LPN to ADN program who had stopped admissions but then decided to restart them reported having a maximum capacity of 40 students but reported zero students enrolled. This was most likely the result of of the timing of this survey being before their admissions processes were complete.

The average age of a student enrolled across respondents during the 2023-2024 academic year ranged from 18 to 35. The average age of enrolled students among all programs is 25.5 years old.

The racial composition of students, much like the larger licensed nurse population, is primarily Caucasian or White (90.4%; N=3,181), followed by African American or Black, (4.1%; N=146), Multi Racial (2.8%; N=100), Other (1.3%; N=45), Asian (1.1%; N=40), American Indian or Alaska Native (<0.1%; N=4), and Native Hawaiian or Other Pacific Islander (<0.1%; N=4).

Ethnically, most students are not Hispanic, Latino, or Spanish in origin (94.3%; N=3,220).

With regards to gender, most students are female (85.3%; 2,984), followed by male (14.6%; 511) and unknown (<.01%; 2).

STUDENT DEMOGRAPHICS

The total number of students who started in the last graduating cohort (August 2022 through July 2023) among all pre-licensure registered nursing programs is 1,251.

Programs indicate that the percentage of students who graduate on time from programs ranges from 42.8% to 100%. The median percentage of students graduating on time among all respondents was 70.5%.

Students at nursing programs in West Virginia are eligible for a wide variety of support services to facilitate learning and academic success. ESL services, which include services for nonnative English speakers to allow students to practice reading, listening, speaking and writing in English, are offered at 51% (34) of programs. Disability services, which include making reasonable accommodations for students who qualify under the Americans Disability Act, are offered at 94% (65) of programs. Low socioeconomic student programs, which include access to services like peer monitoring, tuition assistance, work-study programs, books, etc, are offered at 99% (68) of programs. Formal remediation for academic support is offered at 87% (60) of programs. Formal remediation for clinical experiences, which help promote safe nursing practice, are offered at 88% (61) of programs.

Available Support Services

Percentage of Programs Offering Services
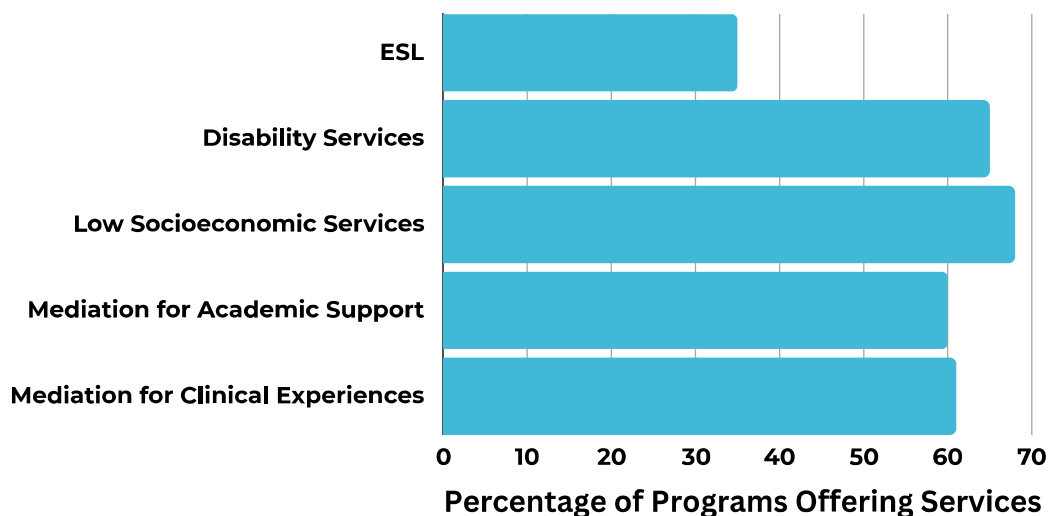
FACULTY DEMOGRAPHICS

The number of full-time faculty across all WV programs is 535. Additionally, there are 302 clinical adjunct faculty and 158 part-time faculty, for a total of 995 nursing faculty working at nursing programs in West Virginia.

The percentage of full-time faculty in nursing programs ranged from 6.25% to 100%. Regulatory guidelines and evidence-based quality indicators for nursing education identify pre-license registered nurse education programs with less than 35% fulltime faculty as a warning sign (Spector, et al., 2020). There were 16 programs reporting less than 35% full-time faculty during the year. This was an increase from last year when there were 13 programs who had less than 35%.

When respondents were asked about the highest nursing degrees obtained by their nursing directors, most cited Master's of Science in Nursing (65%; 45).

Highest Degree of Director
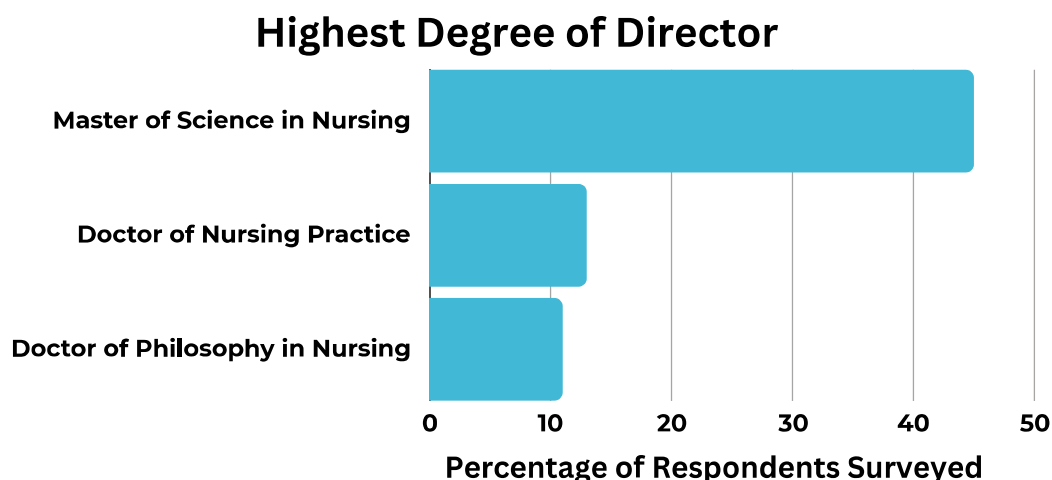
37.7% (26) of nursing directors surveyed had degrees outside of nursing. Of those with non-nursing degrees, the most common was a Baccalaureate degree (11), followed by other master's degrees (8), associate degrees (4), doctor of philosophy (1), master of education (1), and doctor of education (1).

FACULTY DEMOGRAPHICS

Nursing program director changes reported in the past 5 years ranged from 1 to 7 changes. Only 3 programs out of 69 reported they had more than 3 directors in less than 5 years. One program reported they had 7 directors in 5 years and 2 programs reported they had 4 directors in 5 years. Regulatory guidelines and evidence-based quality indicators for nursing education identify programs with more than 3 directors within 5 years as warning signs (Spector et al., 2020).

16% (N=11) of programs reported their nursing director had administrative responsibility for allied health professions, an increase from last year's 13% reporting the same. 86% (N=59) of programs reported they had an assistant or associate program director.

91% (N=63) of programs reported they had dedicated administrative support for general office management such as answering phones and doing clerical work and a variety of other tasks.

Formal orientation and mentoring were offered by 96% (N=66) of programs for full-time faculty. Formal orientation was offered for new adjunct faculty and new part-time faculty by 83% of programs.
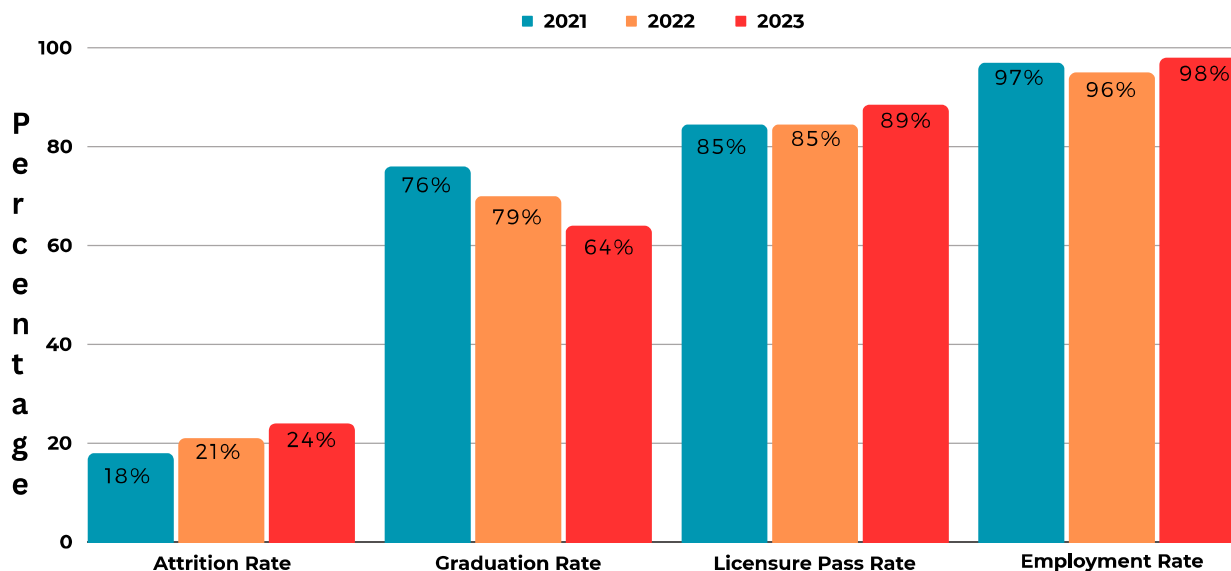
97% (N=67) of programs report having support devoted to faculty development. Faculty development support included monetary, substantive periodic workshops, and other support (i.e. paid workloads, webinar series, grants, membership fees, workshops, consultants, subscriptions, certification prep courses, and simulation courses).

NURSING PROGRAM OUTCOMES

Program outcomes among respondents across all programs varied per W.Va. code of legislative rule 19-01.

- **The calendar year 2022 licensure pass rates varied from 11.11% to 100%. The Board standard for licensure pass rate is 80% or higher Seven WV NCLEX-RN programs had licensure pass rates below 80%. The median licensure pass rate was 85% among all programs.**

- **The calendar year 2022 graduation rates varied from 41.4% to 100%. The Board standard for graduation rate is 50% or higher Twenty six of 69 or 37% of WV NCLEX-RN programs reported graduation rates less than 50%. The median graduation rate was 62.5% among all programs.**

- **The calendar year 2022 attrition rates varied ranging from 0% to 92%. There is no adopted Board standard for attrition rate. Six of 69 or 8.68% of WV NCLEX RN programs reported attrition rates > than 50%. The median attrition rate was 9.1% among all programs.**

- **The calendar year 2022 employment rates for graduates varied, ranging from 0% to 100%. There is no adopted Board standard for employment rate. The median employment rate was 98% among all programs.**

Nursing Program Outcomes

Legend: ■ 2021 ■ 2022 ■ 2023

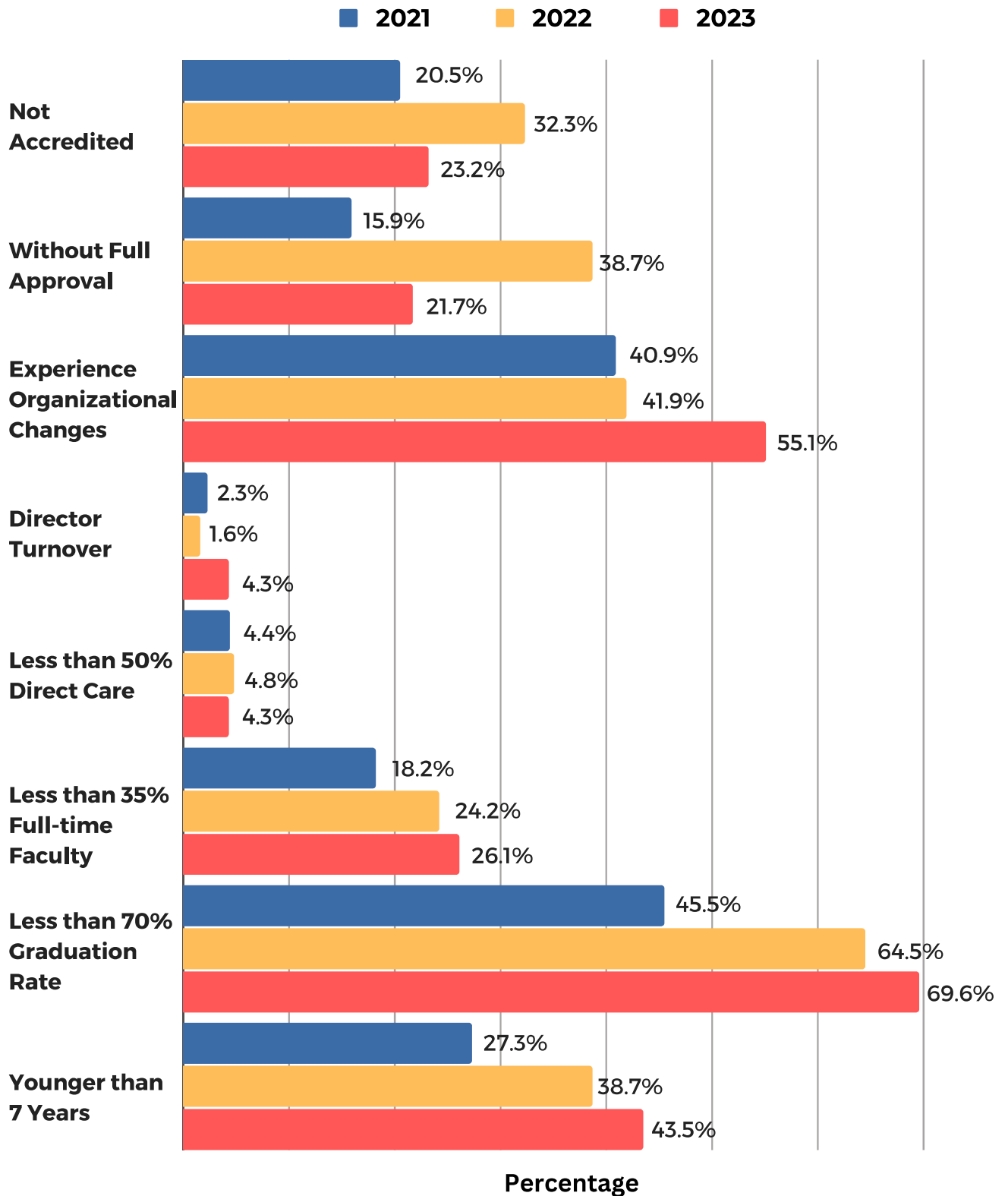|	Attrition Rate	Graduation Rate	Licensure Pass Rate	Employment Rate
2021	18%	76%	85%	97%
2022	21%	79%	85%	96%
2023	24%	64%	89%	98%

Y-axis: Percentage (0, 20, 40, 60, 80, 100)

KEY QUALITY INDICATORS

When reviewing the results of this survey against key quality indicators, nursing programs in WV are not meeting the standards. The following is a list of summary percentages across all programs not meeting the published key quality regulatory guidelines (Spector et. al. 2020)

- **23.2% of nursing programs in WV are not accredited.**
- **21.7% of nursing programs in WV do not have full approval.**
- **55.1% of nursing programs in WV have experienced major organizational changes.**
- **4.3% of nursing programs in WV had nursing director turnover greater than 3 in the last 5 years.**
- **4.3% of nursing programs in WV reported that students spent less than 50% of their time experiencing direct patient care.**
- **26.1% of nursing programs in WV had less than 35%, fulltime faculty.**
- **69.6% of nursing programs in WV had a graduation rate of less than 70%.**
- **43.5% of nursing programs in WV were younger than 7 years old.**

Key Performance Indicators

Legend: ■ 2021 ■ 2022 ■ 2023

Not Accredited
- 2021: 20.5%
- 2022: 32.3%
- 2023: 23.2%

Without Full Approval
- 2021: 15.9%
- 2022: 38.7%
- 2023: 21.7%

Experience Organizational Changes
- 2021: 40.9%
- 2022: 41.9%
- 2023: 55.1%

Director Turnover
- 2021: 2.3%
- 2022: 1.6%
- 2023: 4.3%

Less than 50% Direct Care
- 2021: 4.4%
- 2022: 4.8%
- 2023: 4.3%

Less than 35% Full-time Faculty
- 2021: 18.2%
- 2022: 24.2%
- 2023: 26.1%

Less than 70% Graduation Rate
- 2021: 45.5%
- 2022: 64.5%
- 2023: 69.6%

Younger than 7 Years
- 2021: 27.3%
- 2022: 38.7%
- 2023: 43.5%

Percentage

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Lioce, L., Lopreiato, J., Downing, D., Chang, T. P., Robertson, J. M., Anderson, M.. ... & Terminology and Concepts Working Group. (2020). Healthcare simulation dictionary. Rockville, MD: Agency for Healthcare Research and Quality, 2020, 20-0019.

Spector, N., Silvestre, J., Alexander, M., Martin, B., Hooper, J.I., Squires, A., & Ojemeni, M. (2020). NCSBN regulatory guidelines and evidence-based quality indicators for nursing education programs. Journal of Nursing Regulation, 11(2), S1-S64. https://www.ncsbn.org/Spector_NCSBN_Regulatory_Guidelines __and_Evidence_Based_Quality_Indicators_for_Nursing_education_programs.pdf