



NCSBN

Leading Regulatory Excellence

Building A Robust APRN National Database

- Nursys[®] and APRN Certifiers
- Unique Nurse Identifier (UNI – NCSBN ID)
- Nurse Workforce Data Collection

CONTACT INFORMATION

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Nursys® & APRN Certifiers

- Data in Nursys belongs to the Primary Source Board of Nursing (BON).
- [32 BONs share APRN license data](#) and ALL BONs share APRN discipline data with each other (Nursys.org) and state approved APRN license and discipline data via public Nursys.com, free of charge.
- There are ~2,600,000 RNs from the same 32 BONs in Nursys and ~273,000 APRN's (~10.5%) of all roles - CNP, CNS, CNM, CRNA.
- There are ~4,440,000 RNs in the Nursys system as of this writing from ALL BONs in the U.S.
- NCSBN executed data sharing agreement with APRN certifiers -NBCRNA and AACN. This provides BONs and the APRN certifiers data needed for their operational and public protection work. Agreement with NCC is in progress.
- Data by itself is just that, however if shared and exchanged between relevant parties and with the use of data analytics it can highlight important insights and help with evidence-based decision making.
- **We encourage every BON and APRN certifier to share their APRN related data sets.**

Unique Nurse Identifier (UNI – Nurse’s NCSBN ID)

- UNI (nurse’s NCSBN ID) allows to uniquely identify a U.S. nurse regardless of how many states in which the nurse is licensed. It is an eight-digit public identifier assigned to a nurse for life upon getting their first U.S. nurse license (LPN/VN or RN) and will never expire or be recycled, just like SSN is to an individual.
- Federal, State, Non-profit, For profit, Hospital systems, Educational institutions – ALL have nurse data sets for nurses in their systems and databases. With UNI embedded in their data sets, protected nurse personally identifiable information (PII) such as SSN, DOB, etc. will no longer be needed for nurse identification and will facilitate data sharing and exchange for research, operational and important public protection work. UNI is publicly available; however, it is the responsibility of each organization to securely protect their nurse data sets.
- Information systems can relatively easily record nurse’s patient care contributions throughout the care continuum by simply using the UNI. Aggregate data analysis can help with meaningful evidence-based decisions. Searching for a nurse in databases can be made easy using ONLY the UNI.

Unique Nurse Identifier (UNI – Nurse’s NCSBN ID)

- Agencies can ask the nurse to provide their UNI as part of creating a nurse record in their systems or institutions can get it from the [Nursys system](#), **FREE of Charge** – via [online nurse lookup](#), [file exchange](#) or [through application programming interface \(API\)](#). All [~5 MIL U.S. nurses](#) have been assigned a UNI and there is a continuous secure process to automatically assign a UNI to a newly licensed U.S. nurse.
- National Provider Identifier (NPI) is used to uniquely identify a health care provider in health care claims data set, which is important for what it is designed and used. Data collected in 2018 shows ~100K APRNs have an NPI assigned, which is ~2% of the total U.S. nurse population. NPI cannot be used as a UNI for nurses in the U.S.

Unique Nurse Identifier (UNI – Nurse’s NCSBN ID) Resources

- [Alliance for Nursing Informatics recommendation and supporting documents](#)

Additional Resources:

- [Implementation of a unique nurse Identifier](#)
- [What a unique nurse identifier means for the future](#)
- [Demonstrating the value of nursing care through the use of a unique nurse identifier](#)
- [Promoting the role of the nurse with a unique nurse identifier](#)

Nurse Workforce Data

- In this digital society data is the lifeblood, and capturing data via online systems allow for rapid, dynamic and agile data collection process.
- Organizations need agile data analytics to inform evidence-based strategies in our current ever-changing world.
- Collection of nurse workforce data through the Board of Nursing (BON) online license management system can facilitate dynamic and agile data collection process.
- NCSBN introduced Nursys nurse e-Notify system to the BONs that are not able to digitally capture nurse workforce data via their online systems.
- Nursys nurse e-Notify system provides integration through system-to-system API process to the BON system to facilitate nurse workforce data capture.
- Nursys system also provides to the BON self-service data dashboard for collecting various pre-configured nurse workforce reports as well as raw workforce survey data set of nurses from their jurisdiction.
- Current statistics show 780K+ nurse enrollment in the Nursys nurse e-Notify system.



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Missouri Background

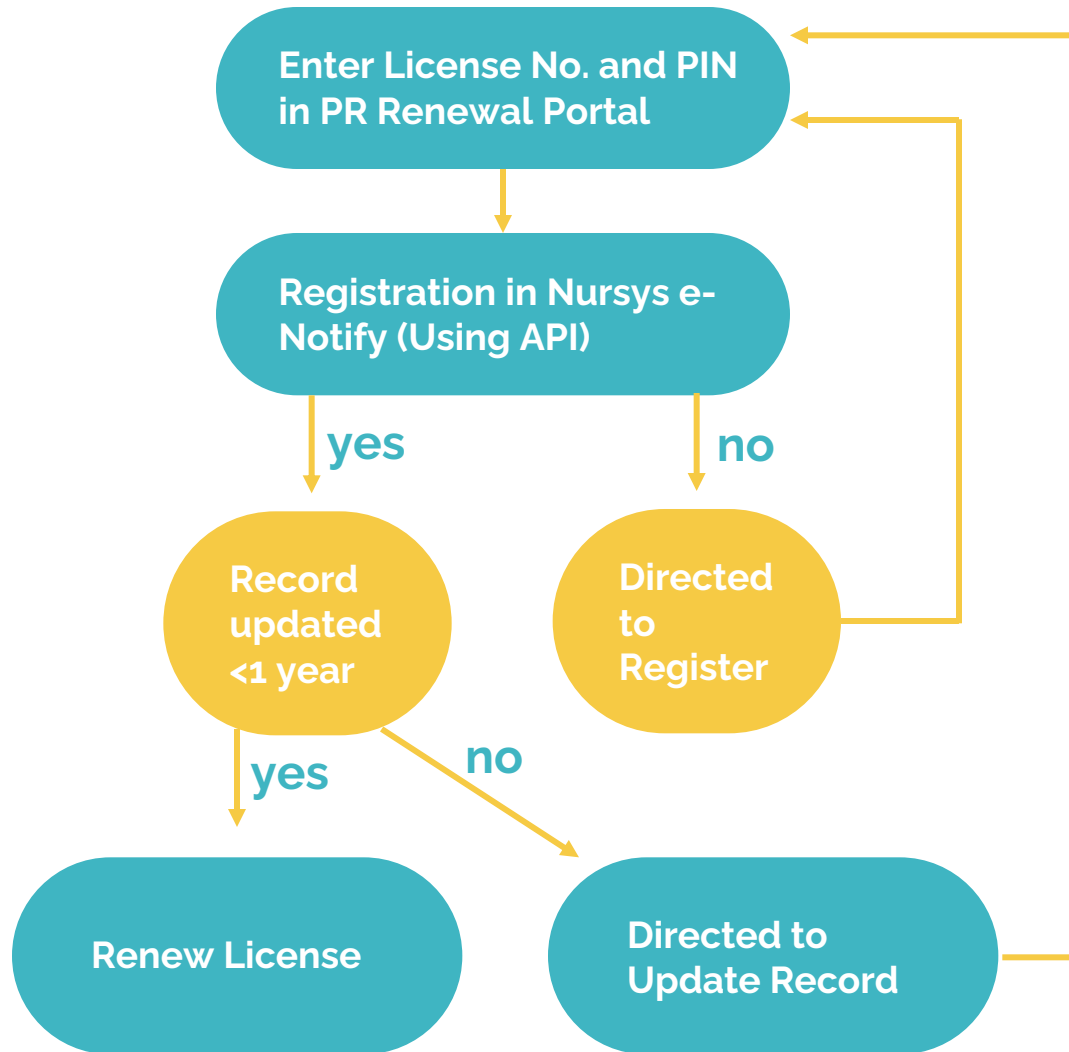
- RN Licenses Expire April 30th Odd-Numbered Years
- APRNs are RECOGNIZED. Expiration date = national certification expiration date or RN Expiration Date; whichever is sooner
- Must have an active Missouri RN License or Nurse Licensure Compact (NLC) Multistate License (MSL) to obtain & retain APRN recognition

Nursys[®]

- Hosted webinars focused on employer use of *Institution Nursys e-Notify[®]*
- Eliminated license cards 2010 for renewal 2015 for initial licenses
- Licenses and APRN Recognitions can **only** be Verified through Nursys[®]
- Applicants register with Nursys e-Notify[®] *As a Nurse* upon application
- Notification of license issuance and expiration reminders through Nursys[®]
- Workforce Questions are incorporated in Nursys e-Notify[®]
- 2018 Changed Rule for License Renewal to require “information related to the nurse’s practice and demographics for the purpose of collecting nursing workforce data.”

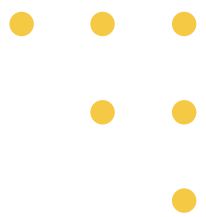
Nursys

e-Notify: Missouri Renewals





Outcomes



- 2015 – 273 institutions 21,755 nurses
- Currently - 1,437 Institutions 131,679 nurses
- 134,814 Nurses (140,933 active) 95.7% enrolled as a Nurse
- Contract with The University of Missouri Center for Health Policy, Office of Health, Outreach, Policy, and Education to produce reports
- Annual Workforce Reports 2018-2021
- Joined the National Forum of State Nursing Workforce Centers

Minimum Data Set – The National Forum of State Nursing Workforce Centers

- Gender
- Age Distribution
- Age of Faculty
- Age at Licensure
- Race
- Ethnicity
- Educational Attainment
- Faculty Highest Level of Nursing Ed
- % of Foreign Nurses
- Number of Years Licensed
- Work Status
- Reason for Unemployment



Minimum Data Set – The National Forum of State Nursing Workforce Centers Continued

- Number of Positions Currently Employed
- Average Hours Worked Per Week
- Primary & Secondary Employment Setting, Position Description & Employment Specialty
- Average Age by Primary Employment Specialty
- Primary Employment Setting for Those Working 40+ Hours/week
- Primary Employment Setting for Those Aged 55+



Key Findings

- Underrepresented Black or African American.
- 86% of RNs and APRNs work in metropolitan. Only 5.3% in rural areas.
- 17.8% of APRNs hold more than one position.
- 23% of APRNs work more than 40 hours per week
- 20.1% of APRNs work 0-35 hours per week
- 48% of APRNs work in hospitals. Ambulatory care, physician's office and primary care 18.7%
- 5.7% of APRNs not employed in nursing. Of the 5.7%, 41% of the APRNs not employed due to school.



Next Steps

- Commuting Patterns -APRNs practice within 75 miles of collaborating physician
- Does the lower rate of APRNs employed in rural areas correlate to the location of collaborating physicians?
- Similar analysis of additional healthcare professions
- Launch Web Portal in 2022



Solutions

- Industry Needs to Use the Data to Inform Strategies
- Board of Nursing Nursing Education Incentive Program (nursing grants)
- Academic/Clinical Partnerships
- Shared Faculty Consortium paired with Robust Nursing Faculty Orientation & Mentoring Programs including Graduate-Level Nurse Educators
- Graduate-Level Nurse Educator Apprenticeship Program
- Scholarship Program for APRN/Nurse Educator Education



Board of nursing and policy makers

are best positioned to fulfill their public protection mandates when they understand the dynamics of the nursing workforce. This workforce analysis indicates that Missouri has shortages in certain geographic areas of the state and provides its board of nursing with valuable information for targeting solutions. Solutions will need to focus on several strategies, including targeting geographic areas for supply increase, addressing work-life balance, and reducing regulatory barriers to practice.



Thank You



MISSOURI
State Board of Nursing



Building a Robust APRN National Database

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Associate Professor

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2022 NCSBN APRN Roundtable

April 12, 2022



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The APRN Workforce

- There are more than 355,00 nurse practitioners in the US (AANP, 2022)
 - Little is known about these advanced providers
- Only licensure lists include data (limited) on all APRNs
- Ongoing sample surveys of nurses including APRNs
- Survey samples of APRNs are very small
 - Data are weighted to generalize to the overall population



The APRN Workforce: Data Sources

- Licensure Sources (mandatory)
 - State Boards of Nursing
 - National Council of State Boards of Nursing
- Federal Data Sources (voluntary)
 - U.S. Census Bureau - American Community Survey (ACS)
 - U.S. Bureau of Labor Statistics (BLS)
 - Health Resources and Services Administration (HRSA)
- Organizational Data Sources (voluntary)
 - American Association of Nurse Practitioners
 - National Forum of State Nursing Workforce Centers
 - National Council of State Boards of Nursing



Data Sources: Limitations

Federal and organizational data sources have limitations

- Data are from sample surveys
- Sample sizes from each state are small but weighted
- Small samples can be problematic and lead to bias
 - Variability
 - Small samples result in large variability and provide less accurate results (reliability)
 - Coverage or non-response bias
 - Most common bias
 - Voluntary response bias
 - Survey only available to certain groups



A Comparison of Data Sources: Georgia

	GBON* (N = 59,883)	HRSA (N = 92,436)	NCSBN (N = 108,378)	U.S. Census Bureau (N = 95,030)
Types of License				
RN	52,574 (87.8%)	83,002 (89.8%)	92,421 (86.4%)	85,190 (93.8%)
APRNs	7,309 (12.2%)	9,434 (10.2%)	14,580 (13.6%)	5,880 (6.2%)
Age	47.5	47.2	49.0	44.7
Gender				
Female	54,714 (92.2%)	85,032 (92.0%)	100,116 (92.8%)	87,122 (91.7%)
Male	4,647 (7.8%)	7,404 (8.0%)	7,776 (7.2%)	7,908 (8.3%)
Race				
White	-	65,943 (71.3%)	82,863 (76.4%)	61,059 (64.3%)
Black/African American	-	21,554 (23.3%)	16,848 (15.6%)	24,375 (25.7%)
Other	-	4,939 (5.3%)	8,667 (8.0%)	6,678 (10.0%)
Ethnicity				
Hispanic	478 (0.8%)	5,631 (6.1%)	4,698 (4.3%)	2,718 (2.9%)
Non-Hispanic	59,405 (99.2%)	86,805 (93.9%)	103,680 (95.7%)	92,312 (97.1%)
Level of Education				
Associate or less	18,072 (30.2%)	31,751 (34.3%)	38,475 (35.5%)	31,711 (33.4%)
Bachelor	24,218 (40.4%)	41,230 (44.6%)	47,466 (43.6%)	45,963 (48.4%)
Master	8,535 (14.3%)	17,847 (19.3%)	19,197 (17.7%)	16,492 (17.4%)
Doctorate	732 (1.2%)	1,608 (1.7%)	2,835 (2.6%)	864 (0.9%)
Setting				
Hospital and inpatient	36,092 (60.3%)	63,342 (68.5%)	51,759 (47.8%)	63,852 (67.2%)
Community-based care	12,631 (21.1%)	15,886 (17.2%)	8,991 (8.3%)	17,327 (18.2%)
Other	10,002 (16.8%)	13,208 (14.3%)	45,927 (42.4%)	14,175 (15%)
Hours per week	37.3	36.6	38.5	38.9

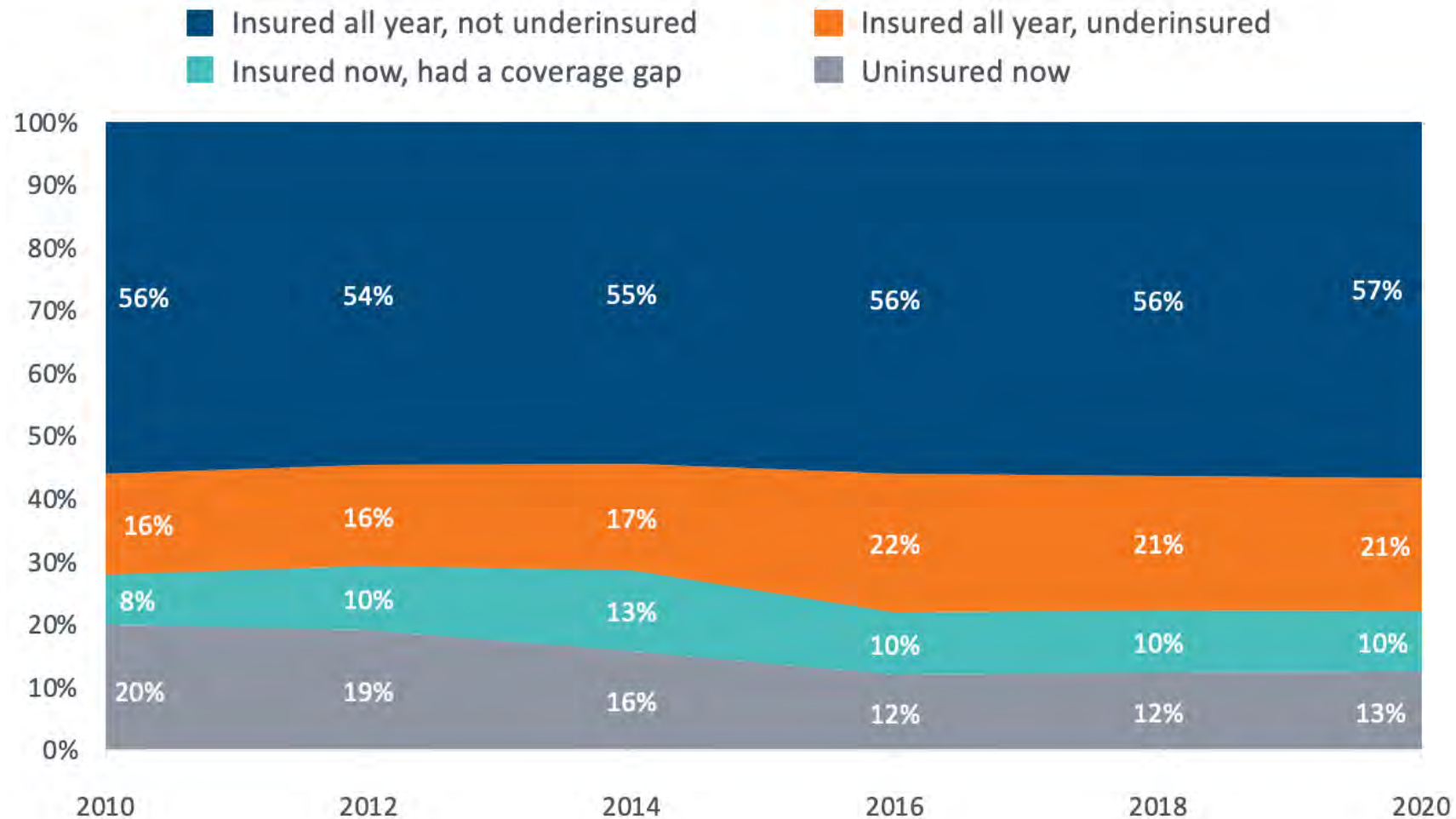
Source: Li, Greenwood, Eichelberger, Marion, Cleghorn, Wheeler, & Cimiotti. (2022). State and national data on the Georgia nursing workforce. Nursing Outlook, 70, 47-54.



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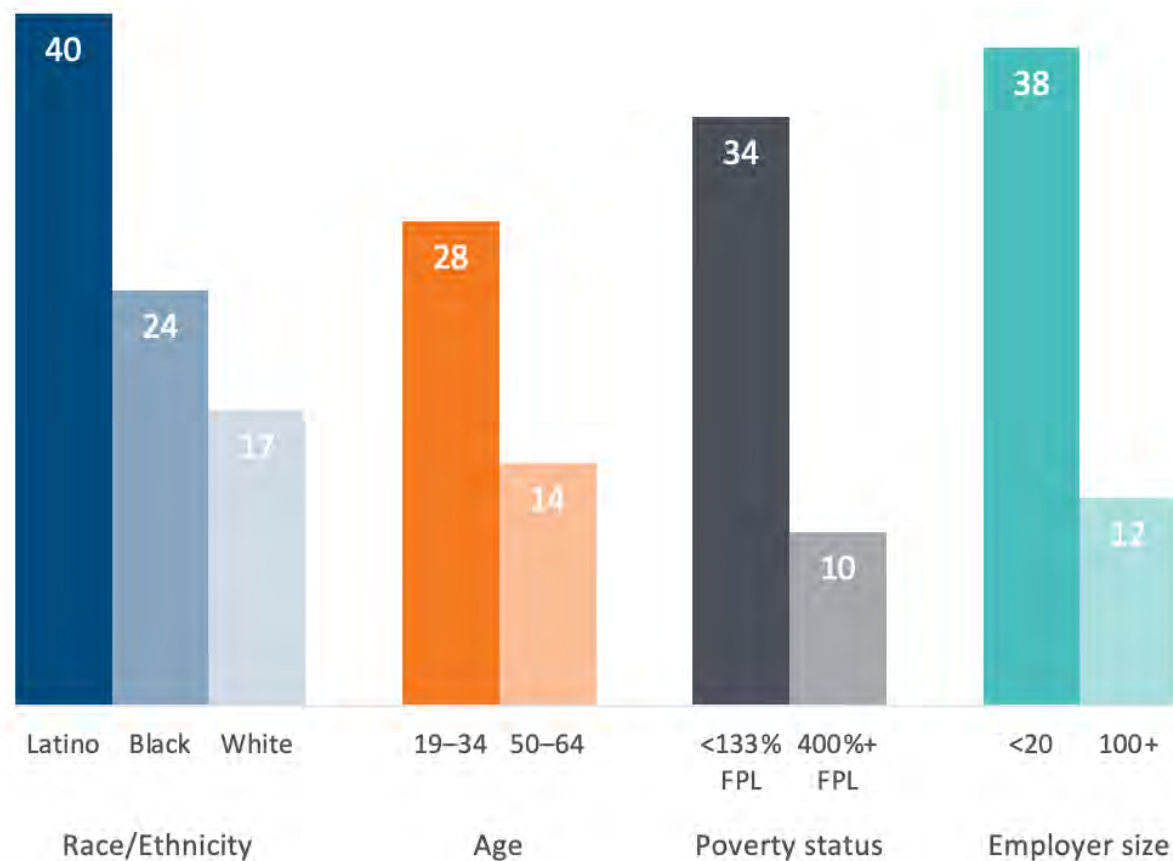
The Need for APRN Data: Insurance Status

Percent of adults ages 19–64



The Need for APRN Data: Health Equity

Percent of adults ages 19–64 who were uninsured anytime in the past year



Percent of adults ages 19–64 who were underinsured



The Future of the APRN Workforce

- Nursing profession is in turmoil and APRNs could take on a new role
- Data are need on all nurses including APRNs
 - A complete data source is vitally important now!
- Licensing and regulatory boards must require data from all licensees
 - Data from individual states varies considerably (bias)
 - Data needed on demographic and practice characteristics and more ...
- It is imperative that individual states work with NCSBN
 - NCSBN can reliably collect, store, and analyze data on the nursing workforce
 - Nursys or similar platform could be a repository for extensive data on all nurses

