

## Minimum Nurse Supply Dataset

### Initial Rationale for Selection and Measurement of Minimum Dataset Items

The National Forum of State Nursing Workforce Centers collected Nurse Supply Survey instruments from all Forum subscriber states as well as non-subscriber states participating in the 2008 Education Capacity Summit hosted by AARP's Center to Champion Nursing in America. The instruments were compiled into a spreadsheet showing the number of states collecting data on each variable along with their method of measurement. In addition to state-level instruments, the Minimum Supply Dataset recommended by Colleagues in Caring in 1995 was described on the spreadsheet. Using this spreadsheet, a survey was developed that identified the items collected and asked respondents to rate the importance of each for 1) supply forecasting and 2) policy issues. The survey was fielded to each Forum subscriber or Education Capacity state.

The Minimum Supply Dataset Drafting Workgroup reviewed data collection strategies reported in the scientific literature, the spreadsheet, and survey results to identify the most critical items for the minimum dataset and the appropriate measurement approach for each.

### 2016 Revisions to the Supply Minimum Dataset

In 2015, because of the evolution and transformation of healthcare and nursing that has taken place since 2009 when the original Supply MDS was adopted, the Forum made the decision to revisit the Supply MDS. Throughout 2015, the National Forum's Research Committee undertook the task of reviewing the Supply MDS to ensure that the elements included are still relevant. This review included an assessment of items currently being collected by states and national organizations in their supply data collection efforts.

The revised elements below are a result of this assessment and lengthy discussions by members of the research committee as well as review and approval of all Forum member executive directors. Additionally, the National Forum solicited comment on the proposed changes to the Supply MDS from national organizations and researchers that work with nursing workforce data. Feedback received was incorporated into the final draft of this revision.

### Instructions for Collecting the Minimum Dataset

This document is intended to guide states in assembling the standardized nurse supply dataset recommended by the National Forum of State Nursing Workforce Centers. Words written in **RED** are defined in the glossary accompanying this dataset.

We recommend that states collect the Minimum Nurse Supply Dataset at initial nurse licensure and license renewal from all licensed nurses (**LPN/LVN, RN, APRN**) in the state. This design generates a complete set of updated data for an individual nurse every time his or her license is

renewed (in most states, every two years). We recognize, however, that states may vary in their capacity to implement such a study design. In lieu of continuous data collection from all licensees, we recommend that the Minimum Nurse Supply Dataset be collected from random or representative samples as often as possible. We anticipate that states will work towards and eventually achieve collection of data on the entire licensed nurse population for submission to the national nurse supply dataset.

This Minimum Nurse Supply Dataset is intended to be a data standardization model and in no way is meant to limit data collection in your state.

**Essential Elements**

The National Forum’s Research Committee identified the following 6 variables as being the most essential data elements a state could collect. These variables are already being collected by a majority of states and standardizing the collection of these elements among all states would be the most paramount to workforce analyses.

- Variable 1: Gender
- Variable 2: Ethnicity
- Variable 3: Race
- Variable 4: Year of birth
- Variable 6: Highest level of nursing education
- Variable 12: Employment status
- Variable 17: Employer’s zip code

**Demographics**

**Variable 1:** Gender

**Stem (example):** What is your gender?

**Response Categories:** Male, Female

**Variable 2:** Ethnicity

**Stem (example):** Are you of Hispanic or Latino origin?

**Response Categories:**

Yes, No

**Variable 3:** Race

**Stem (example):** What is your race? (Mark all that apply)

**Response Categories:**

American Indian or Alaska Native

Asian

Black/African American

Native Hawaiian or Other Pacific Islander

White/Caucasian

Other

**Variable 4:** Year of birth

**Stem (example):** In what year were you born?

**Response Categories:** Open ended field

**Variable 5:** Entry level education

**Stem (example):** What type of nursing degree/credential qualified you for your first U.S. nursing license?

**Response Categories:**

Vocational/Practical certificate-nursing

Diploma-nursing

Associate degree-nursing

Baccalaureate degree-nursing

Master's degree-nursing

Doctoral degree-nursing (PhD)

Doctoral degree-nursing (DNP)

**Variable 6:** Highest level of nursing education

**Stem (example):** What is your **highest level of nursing education?**

**Response Categories:**

Vocational/Practical certificate-Nursing

Diploma-Nursing

Associate degree-Nursing

Baccalaureate degree-Nursing

Master's degree-Nursing

Doctoral degree-Nursing (PhD)

Doctoral degree-Nursing Practice (DNP)

Doctoral degree-Nursing other

**Variable 7:** Highest level of education in another field

**Stem (example):** What is your **highest level of non-nursing education?**

**Response Categories:**

Associate degree-Non nursing

Baccalaureate degree-Non-nursing

Master's degree-Non-nursing

Doctoral degree-Non-nursing

Not applicable

|  |
|--|
| <b>License/Certification Information</b> |
|--|

**Variable 8:** License type

**Stem (example):** What type of license do you currently hold? (Mark all that apply.)

**Response Categories:**

**RN**

**LPN**

**APRN**

**Variable 9:** Year of Initial U.S. licensure

**Stem (example):** Year of Initial U.S. Licensure

**Minimum Response Categories:** Open-ended field or drop-down menu

**Variable 10:** Country of Initial RN/LPN licensure

**Stem (example):** In what country were you initially licensed as RN or LPN

**Minimum Response Categories:** Open-ended field

**Variable 11:** License status

**Stem (example):** What is the status of the license currently held?

**Response Categories:** **Active** or **Inactive**

**Variable 12:** Advanced Practice Registered Nurse License/Certification

**Stem (example):** Indicate whether you are credentialed in your state to practice as any of the following: (Select all that apply.)

**Response Categories:**

Certified Nurse Practitioner

Clinical Nurse Specialist

Certified Registered Nurse Anesthetist

Certified Nurse Midwife

Not credentialed as any of the above

### **Employment Information**

**Variable Group 13:** Employment status

**Stem (example):** What is your employment status? (Mark all that apply)

**Response Categories:**

Actively employed in nursing or in a position that requires a nurse license full-time

Actively employed in nursing or in a position that requires a nurse license part-time

Actively employed in nursing or in a position that requires a nurse license on a per-diem basis

Actively employed in a field other than nursing full-time

Actively employed in a field other than nursing part-time

Actively employed in a field other than nursing on a per-diem basis

Working in nursing only as a volunteer

Unemployed, seeking work as a nurse

Unemployed, not seeking work as a nurse

Retired

**Variable Group 14:** Reason for being unemployed

**Stem (example):** If unemployed, please indicate the reasons.

**Response Categories:**

Taking care of home and family

School

Disabled

Difficulty in finding a nursing position

Inadequate Salary

Other

**Variables 15-19 intended only if individual is actively employed in nursing**

**Variable 15:** Number of positions employed in

**Stem (example):** In how many positions are you currently employed as a nurse?

**Response Categories:** 1, 2, 3 or more

**Variable 16:** Hours worked per week

**Stem (example):** How many hours do you work during a typical week in all your nursing positions?

**Response Categories:** Open-ended field

**Variable 17:** Employer's address

**Stem (example):** Please indicate the state and zip code of your primary employer.

**Response Categories:** Open-ended field

**It is recommended that information for both primary and secondary positions be collected for variables 18-20.**

**Variable 18: Employment Setting\***

**Stem (example):** Please identify the type of setting that most closely corresponds to your nursing practice position.

**Response Categories:**

|                            |   |
|----------------------------|---|
| Hospital                   | Dialysis Center                             |
| Nursing Home/Extended Care | Community Health                            |
| Assisted Living Facility   | School Health Service                       |
| Home Health                | Occupational Health                         |
| Hospice                    | Ambulatory Care Setting                     |
| Correctional Facility      | Insurance Claims/Benefits                   |
| School of Nursing          | Policy/Planning/Regulatory/Licensing Agency |
| Public Health              | Other (Please specify) _____                |

**Variable 19: Employment Position\***

**Stem (example):** Please identify the position title that most closely corresponds to your nursing practice position.

**Response Categories:**

|                        |  |
|------------------------|--|
| Consultant             | Advanced Practice Registered Nurse         |
| Nurse Researcher       | Staff Nurse                                |
| Nurse Executive        | Case Manager                               |
| Nurse Manager          | Other-Health Related (Please specify)_____ |
| Nurse Faculty/Educator | Other-Not Health Related (Please specify)_ |

**Variable 20: Employment Specialty\***

**Stem (example):** Please identify the employment specialty that most closely corresponds to your nursing practice position.

**Response Categories:**

|                                  |   |
|----------------------------------|---|
| Acute care/Critical Care         | Palliative Care/Hospice                         |
| Adult Health                     | Pediatrics                                      |
| Family Health                    | Neonatal  |
| Anesthesia                       | Perioperative                                   |
| Cardiology                       | Public Health                                   |
| Community                        | Psychiatric/Mental Health/Substance Abuse       |
| Geriatric/Gerontology            | Rehabilitation                                  |
| Home Health                      | School Health                                   |
| Maternal-Child Health/Obstetrics | Emergency/Trauma                                |
| Medical Surgical                 | Women's Health                                  |
| Nephrology                       | Other-Clinical specialties (Please specify)     |
| Occupational health              | Other-Non-clinical specialties (Please specify) |
| Oncology                         |   |

\* The response options for these variables were derived from the response options to similar questions in HRSA's National Sample Survey of Registered Nurses. After discussion among work group members and Forum members who participated in the initial data summit, we felt that by collapsing some of the response options we would have a better opportunity of meeting our Minimum Data Set goals of capturing data that is already being collected instead of asking for an exhaustive and very detailed list of settings, positions, and specialties.

**Glossary of Operational Definitions**

**Active** – a license that is up to date on all licensure and/or renewal requirements

**Advanced Practice Registered Nurse** - is a nurse who has obtained a license to practice as an APRN in one of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), clinical nurse specialist (CNS), or certified nurse practitioner (CNP).<sup>2</sup>

**Certified Nurse Midwife (CNM)** – provides a full range of primary health care services to women throughout the lifespan, including gynecologic care, family planning services, preconception care, prenatal and postpartum care, childbirth, and care of the newborn. The practice includes treating the male partner of their female clients for sexually transmitted disease and reproductive health. This care is provided in diverse settings, which may include home, hospital, birth center, and a variety of ambulatory care settings including private offices and community and public health clinics.<sup>2</sup>

**Certified Nurse Practitioner (CNP)** - For the certified nurse practitioner (CNP), care along the wellness-illness continuum is a dynamic process in which direct primary and acute

care is provided across settings. CNPs are members of the health delivery system, practicing autonomously in areas as diverse as family practice, pediatrics, internal medicine, geriatrics, and women's health care. CNPs are prepared to diagnose and treat patients with undifferentiated symptoms as well as those with established diagnoses. Both primary and acute care CNPs provide initial, ongoing, and comprehensive care, includes taking comprehensive histories, providing physical examinations and other health assessment and screening activities, and diagnosing, treating, and managing patients with acute and chronic illnesses and diseases. This includes ordering, performing, supervising, and interpreting laboratory and imaging studies; prescribing medication and durable medical equipment; and making appropriate referrals for patients and families. Clinical CNP care includes health promotion, disease prevention, health education, and counseling as well as the diagnosis and management of acute and chronic diseases. Certified nurse practitioners are prepared to practice as primary care CNPs and acute care CNPs, which have separate national consensus-based competencies and separate certification processes<sup>2</sup>

**Certified Registered Nurse Anesthetist (CRNA)** – is prepared to provide the full spectrum of patients' anesthesia care and anesthesia-related care for individuals across the lifespan, whose health status may range from healthy through all recognized levels of acuity, including persons with immediate, severe, or life-threatening illnesses or injury. This care is provided in diverse settings, including hospital surgical suites and obstetrical delivery rooms; critical access hospitals, acute care; pain management centers, ambulatory surgical centers; and the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons. <sup>2</sup>

**Clinical Nurse Specialist (CNS)** – has a unique APRN role to integrate care across the continuum and through three spheres of influence: patient, nurse, system. The three spheres are overlapping and interrelated but each sphere possesses a distinctive focus. In each of the spheres of influence, the primary goal of the CNS is continuous improvement of patient outcomes and nursing care. Key elements of CNS practice are to create environments through mentoring and system changes that empower nurses to develop caring, evidence-based practices to alleviate patient distress, facilitate ethical decision-making, and respond to diversity. The CNS is responsible and accountable for diagnosis and treatment of health/illness states, disease management, health promotion, and prevention of illness and risk behaviors among individuals, families, groups, and communities. <sup>2</sup>

**Employed in nursing** – A nurse who receives compensation for work that requires licensure and/or educational preparation as a nurse. <sup>1</sup>

**Full-time** – An individual employed for a full work week as defined by the employer. <sup>1</sup>

**Highest level of education in nursing** - the highest degree obtained in nursing;

**Highest level of education in other field** – highest non-nursing degree obtained

**Inactive (in regard to licensure)** - A license that was not renewed or a license placed on inactive status at the request of the licensee. <sup>1</sup>

**LPN – (or LVN) Licensed Practical Nurse or Licensed Vocational Nurse** – An individual who holds a current license to practice as a practical or vocational nurse in at least one jurisdiction of the United States. <sup>1</sup>

**Part-time** - An individual employed less than full time or less than a full work week, as defined by the employer. <sup>1</sup>

**Per diem** – an arrangement wherein a nurse is employed directly on an as needed basis and usually has no benefits.

**Primary Position** – The position at which you work the most hours during your regular work year.

**RN – Registered Nurse (RN)** An individual who holds a current license to practice within the scope of professional nursing in at least one jurisdiction of the United States. <sup>1</sup>

**Secondary Position** – The position at which you work the second greatest number of hours during your regular work year.

**Employment Setting** - The setting in which nursing personnel provide nursing services <sup>1</sup> See examples below:

**Hospital** (Exclude nursing home units in hospitals but include all clinics and other services of the hospital)

Non-federal, short-term hospital (for example, acute care hospital)

Non-federal, long-term hospital

Non-federal psychiatric hospital (for example, state mental hospital)

Federal government hospital

Other type of hospital

**Nursing Home/Extended Care Facility**

Nursing home unit in hospital

Freestanding skilled nursing facility (nursing home)

Facility for people with intellectual disabilities

Other type of extended care facility

**Home Health**

Health care provided in the patient's home

**Hospice**

In-home and facility based hospice care

**Correctional Facility**

Jail or prisons



**School of Nursing**

LPN/LVN program  
Diploma program (RN)  
Associate degree program (RN)  
Baccalaureate and/or higher degree nursing program (RN)  
Other

**Public Health**

Official state health department  
Official state mental health agency  
Official city or county health department

**Community Health**

Combination (official/voluntary) nursing service  
Community mental health center  
Community/neighborhood health center  
Planned parenthood/family planning center  
Day care center  
Rural health center  
Retirement community center

**School Health Service**

Board of education (public school system)  
Private or parochial elementary or secondary school  
College or university  
Other

**Occupational Health (Employee Health Service)**

Private industry  
Government  
Other

**Ambulatory Care Setting Employee (e.g., Physician/Dentist office)**

Solo practice (physician)  
Solo practice (nurse)  
Partnership (one or more physicians)  
Partnership (one or more nurses)  
Group practice (physicians)  
Group practice (nurses)  
Partnership or group practice (mixed group of professionals)  
Freestanding clinic (physicians)  
Freestanding clinic (nurses)  
Ambulatory surgical center (non-hospital-based)  
Dental practice  
Health Maintenance Organization (HMO)  
Urgent care clinic

**Dialysis Center**

Free standing and hospital based

**Insurance Claims/Benefits**

Insurance Company

**Policy/Planning/Regulatory/Licensing Agency**

Central or regional office of Federal agency

State Board of Nursing

Health planning agency

Nurse Workforce Center

**Other**

Nursing or health professional membership association

Medical supplier (e.g., Drug Company, equipment, etc.)

Other

**Employment position/position title** – the position an individual holds at their place of employment

**Advanced Practice Registered Nurse** - is a nurse who has obtained a license to practice as an APRN in one of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), clinical nurse specialist (CNS), or certified nurse practitioner (CNP).<sup>2</sup>

**Nurse Consultant** – A professional who provides advice or expertise in the field of nursing regarding such issues as nursing education, nurse staffing, nurse policy, etc.

**Nurse Researcher** – An individual who conducts research in the field of nursing

**Nurse Executive** - involved with management and administration concerns. They provide leadership roles in the designing of care, the planning and developing of procedures and policies, and administration of budgets in hospitals, health clinics, nursing homes, and ambulatory care centers.<sup>3</sup>

**Nurse Manager** - An individual who has line management position with 24-hour accountability for a designated patient care services which may include operational responsibility for patient care delivery, fiscal and quality outcomes.<sup>1</sup>

**Nurse Faculty/Educator** – Nurse faculty are individuals employed by a school of nursing or other type of nursing education program and are generally involved in teaching, research and service. Nurse educators provide education to nurses and other healthcare professionals in non-academic settings such as hospitals

**Staff Nurse** – a nurse in direct patient care who is responsible for the treatment and well-being of patients

**Case Manager** - Case management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective outcomes.<sup>4</sup>

**Employment Specialty** – the specific area in which a nurse is specialized or practices

**Acute care/Critical Care** – acute care nurses provide care to patients with acute conditions. Critical care nurses deal specifically with human responses to life threatening problems. <sup>8</sup>

**Adult Health** – nurses in this specialty provide general care for adult patients, including adult primary care, adult pathophysiology, clinical management of medication and treatments, patient assessment and education, patient referral, and planning adult health maintenance programs. <sup>5</sup>

**Anesthesia** – nurses in this specialty provide anesthesia and anesthesia-related care upon request, assignment, or referral by the patient’s physician or other healthcare provider authorized by law, most often to facilitate diagnostic, therapeutic, and surgical procedures. In other instances, the referral or request for consultation or assistance may be for management of pain associated with obstetrical labor and delivery, management of acute and chronic ventilatory problems, or management of acute and chronic pain through the performance of selected diagnostic and therapeutic blocks or other forms of pain management care to patients receiving anesthesia during operative procedures. <sup>6</sup>

**Cardiology** – nurses in this specialty treat patients suffering from heart diseases and conditions<sup>3</sup>

**Community** – is a systematic process of delivering nursing care to improve the health of an entire community (Nehls et al, 2001, pg. 305). It is a synthesis of nursing knowledge and practice and the science and practice of public health, implemented via systematic use of the nursing process and other processes to promote health and prevent illness in population groups. (Community Health Nursing 2008, Clark, Pg. 5).<sup>7</sup>

**Family Health** – nurses in this specialty meet the healthcare needs of the individual and family by providing comprehensive primary care through the lifespan<sup>9</sup>

**Geriatric/Gerontology** – nurses in this specialty provide the special care needed in rehabilitating and maintaining the mental and physical health of the elderly. <sup>3</sup>

**Home Health** - nurses in this specialty provide care for people in their homes, such as those recovering from illness, an accident, or childbirth <sup>3</sup>

**Maternal-Child Health/Obstetrics** – nurses in this specialty provide medical and surgical treatment to pregnant women and to mother and baby following delivery

**Medical/Surgical** – nurses in this specialty provide diagnostic and therapeutic services to acutely ill patients for a variety of medical conditions, both surgical and non-surgical

**Occupational health** - nurses in this specialty provide on-the-job health care for the nation's workforce, striving to ensure workers' health, safety, and productivity <sup>3</sup>

**Oncology** – nurses in this specialty provide care and support for patients diagnosed with cancer. <sup>3</sup>

**Palliative Care/Hospice** – Palliative care is patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information and choice. Hospice care focuses on caring, not curing. Hospice care manages patient’s pain and symptoms, provides emotional, psychosocial, and spiritual support to patients and families during end of life care.<sup>10</sup>

**Pediatrics** – nurses in this specialty provide care and treatment to young patients ranging in age from infancy to late teens

**Neonatal** –provide care and support for very sick or premature newborn babies<sup>3</sup>

**Perioperative** - perioperative nurses are registered nurses (RNs) who work in hospital surgical departments, day-surgery units (also called ambulatory surgery units), clinics, and physicians' offices. They help plan, implement, and evaluate treatment of the surgical patient before, during, and after operation. Perioperative nurses may work closely with the patient, family members, and other health care professionals.<sup>11</sup>

**Public Health** – the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences. Public health nursing practice focuses on population health, with the goal of promoting health, and preventing disease and disability<sup>12</sup>

**Psychiatric/Mental Health/Substance Abuse** - nurses in this specialty aid and support the mental health of patients with acute or chronic psychiatric needs.; pain management nurses who help regulate medications and provide care for those addicted to drugs or alcohol, or who are suffering from other types of substance abuse.<sup>3</sup>

**Rehabilitation** – nurses in this specialty provide physical and emotional support to patients and the families of patients with illnesses or disabilities that affect their ability to function normally and that may alter their lifestyle.<sup>3</sup>

**School Health** – nurses in this specialty are dedicated to promoting the health and well being of children of all ages in an academic environment.<sup>3</sup>

**Trauma** - nurses in this specialty provide emergency care to patients of all ages. These nurses work to maintain vital signs and prevent complications and death.<sup>3</sup>

**Women’s Health** – nurses in this specialty provided care for women across the life cycle with emphasis on conditions that are particular to women

<sup>1</sup> Source: “Definitions” Interagency Collaborative on Nursing Statistics (ICONS)

<http://www.iconsdata.org/definitions.htm>

<sup>2</sup> Source: “Consensus Model for APRN Regulation” National Council of State Boards of Nursing

<sup>3</sup> Source: “Nursing Careers” Discover Nursing.

<http://www.discovernursing.com/nursing-careers>

<sup>4</sup> Source: “Standards of Practice for Case Management” Case Management Society of America

<sup>5</sup> Source: National Center for Education Statistics

<http://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=88816>

- 6 Source: “CRNA Scope of Practice” American Nurses Association.  
<http://www.aana.com/aboutus/Documents/scopeofpractice.pdf>
- 7 Source: Community Health Nursing: Advocacy for Population health – Mary Jo Clark.  
<http://www.cmsa.org/portals/0/pdf/memberonly/standardsofpractice.pdf>
- 8 Source: American Association of Critical-Care Nurses - About Critical Care Nursing  
<http://www.aacn.org/wd/publishing/content/pressroom/aboutcriticalcarenursing.pcms?menu=>
- 9 Source: University of California San Francisco  
<http://nursing.ucsf.edu/about/departments/family-health-care-nursing>
- 10 Source: National Hospice and Palliative Care Organization definitions of Hospice and Palliative care.  
<http://www.nhpco.org/palliative-care-4>  
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- 11 Source: “AORN” Association of perioperative Registered Nurses.  
[http://www.aorn.org/Career\\_Center/Explore\\_Careers/Consider\\_a\\_Career\\_in\\_the\\_OR.aspx](http://www.aorn.org/Career_Center/Explore_Careers/Consider_a_Career_in_the_OR.aspx)
- 12 Source: What is PHN? – Association of Public Health Nurses  
<http://phnurse.org/What-is-Public-Health>
- 13 Source: American Nurses Association, Public Health Nursing Scope and Standards of Practice, 2007