GEORGE MASON UNIVERSITY

Testing a Funding Allocation Methodology
For Title VIII Programs: Phase II

First Expert Panel Meeting
October 31, 2001
Arlington, Virginia
FINAL Meeting Summary

Wednesday, October 31, 2001

INTRODUCTIONS

Mary Wakefield, PhD, RN, and PJ Maddox, EdD, RN, GMU Center for Health Policy Research & Ethics

Dr. Wakefield opened the meeting by introducing meeting participants, including the Division of Nursing (DoN) staff, the GMU Research Team, and members of the Expert Panel. DoN staff present at the meeting included: **Denise Geolot** PhD, RN director, Division of Nursing; and **Carole Gassert** PhD, RN, DoN project officer. The George Mason University team included the co-principle investigators, **P.J. Maddox** Ed, RN and **Mary Wakefield**, PhD, RN; project manager, **Eileen O'Grady** PhD, NP; technical consultants **Graham Atkinson** PhD, health economist, and **Marc Chinoy**, meeting facilitator; and research analyst **Victoria Doyon.**

Expert Panel members attending the meeting were: **Carole Anderson**, PhD, RN, vice provost for academic administration, Ohio State University; **Linda Burnes Bolton**, Dr.PH, RN, vice president and chief nursing officer, Cedars Sinai Medical Center, Los Angeles; **Shirley Chater**, PhD, RN, adjunct professor, Institute for Health and Aging, School of Nursing, University of California, San Francisco; **Mary Foley**, MS, RN, president, American Nurses Association; **Charlene Hanson**, EdD, RN, CS, FNP, FAAN Professor Emerita and Family nurse practitioner, Georgia Southern University; **Arthur Levin**, MPH, director, Center for Medical Consumers; **Virgilio Licona**, MD, associate medical director, Plan de Salud del Valle, Ft. Lupton, Colorado; **Edward Salsberg**, MPA, director, Center for Health Workforce Studies, University of Albany; and **John Supplitt**, MPH, MBA, director, Section for Small and Rural Hospitals, American Hospital Association; panelist **Eula Aiken**, PhD, RN, executive director, Southern Regional Education Board Council on Collegiate Education for Nursing, was not present. A list of all Expert Panel members and their affiliations is available on the Center's Web site at *http://chpre.gmu.edu.*

OVERVIEW OF MEETING PROCEDURES

Marc Chinoy, Meeting Facilitator

Mr. Chinoy outlined the agenda, process and procedures for the panel's first meeting.

REVIEW OF DIVISION OF NURSING TITLE VIII PROGRAMS

Denise Geolot, PhD, Director, Division of Nursing

After giving a brief history of the Bureau of Health Professions' Division of Nursing (DoN)and federally funded nursing programs, Dr. Geolot outlined provisions of Title VIII of the Public Health Services Act, the Health Professions Education Partnership Act of 1998 (P.L. 105-392). The law directs the DoN to develop a funding allocation methodology for its education and practice programs in Parts B, C, and D. Dr. Geolot presented major points associated with P.L 105-392.

Part A -- General provisions – parameters for administering nursing funds:

- **Eligible entities** – nursing schools, nursing centers, academic health centers, state and local governments, other public and private entities
- **Performance outcome standards** – new provision
- **Linkages** – requires description of ties to other relevant education and health care entities, including training programs
- **Matching requirements** – nonfederal matching funds to ensure institutional commitment
- **State and regional priorities** – activities must be consistent with federal, state and regional nursing program plans and priorities

Preference – all grants and contracts are to give preference to projects that substantially benefit rural or underserved populations or projects that help meet public health nursing needs in state or local health departments

Generally applicable provisions

- Awarding grants and contracts
- Information requirement
- Evaluations
- Training programs
- Length of support
- Peer review (except traineeships)

Part B – Advanced Education Nursing – supporting projects to enhance advanced nursing education and practice and traineeships for advanced nursing education

- **Definition** – nurses trained in advanced degree programs, RN/masters' degree programs, post-nursing master's certificate programs, and nurse midwifery certificate programs (in effect as of 11/12/98), including: nurse practitioners, clinical nurse specialists, nurse midwives, nurse anesthetists, nurse educators, nurse administrators, public health nurses, and others determined by the Secretary
- **Examples:**
    - "Preparation of Culturally Competent Family Nurse Practitioners" **–** University of Texas at El Paso
    - "A Nurse Educator Program for Arkansas" **–** University of Arkansas for Medical Services
- **Traineeships** – formula program that pays all or part of costs of tuition, books, fees, reasonable living expenses (limited to 10 percent for doctoral students)

Part C – Increasing Diversity in the Nursing Workforce – supporting projects to increase nursing education opportunities for individuals from disadvantaged backgrounds, including racial and ethnic minorities underrepresented among RNs

- **Projects:**
    - student scholarships and stipends
    - pre-entry activities to help students get into nursing school
    - retention activities to help students complete education
- **Examples**:
    - "Caring for Our Own: A Reservation/University Partnership – Montana State University at Bozeman
    - "IMPARTing Academic Mobility for ADN Graduates" – Thomas Jefferson University, Philadelphia, PA

Part D – Basic Nursing Education and Practice – strengthening capacity for basic education and practice to focus on seven priority areas:

- Nursing practice arrangements in non-institutional settings to improve access to primary health care in underserved areas

- Care for underserved populations and other high-risk groups, including the elderly, individuals with HIV/AIDS, substance abusers, the homeless, victims of domestic violence
- Skills development for practice in organized health care systems
- Cultural competency
- Expansion of baccalaureate enrollment
- Career mobility
- Informatics education, including distance learning methodologies
- **Examples**:
  - "A Computer-Based Model for Statewide Rural RN to BSN Education" – University of Nebraska
  - "Behavioral Health and Primary Care in Appalachia" – East Tennessee State University
  - "An Innovative Practice to Care for Underserved Populations" – Johns Hopkins University

Part F – Funding Methodology for Parts B, C, and D

- **Funding base for FY 1999-2002 --** Until new methodology is developed for implementation in fiscal 2003, the percentage of funds for nurse practitioner/nurse midwifery and nurse anesthetist programs is to remain at not less than the level in effect in FY 1998. With the baseline at $65 million, as stated in the law, the funding levels reserved are:
  - Nurse practitioner/nurse midwifery programs – not less than $17.564 million (27 %)
  - Nurse anesthetist programs – not less than $2.761 million (4 %)

- **Percentage of budget by program for FY 1999-2002, based on FY 1998, and funding levels for FY 2001**:

Program	Percentage	Funding
NP/CNM	28%	$21 million
Other advanced education nursing	20%	$15
Nurse anesthetist	4%	$3 million
AEN traineeship	25%	$18.6 million
Workforce diversity	6%	$4.7 million
Basic nurse education/practice	17%	$12.8 million

- **Proposed appropriations for FY 2002** – same percentages as in previous years

- **Allocation of funds for FY 2003 and subsequent fiscal years**
  - Amounts appropriated among parts B, D, and D according to the new methodology
  - Methodology to be developed under contract, to be completed by February 2002
  - Report to Congress within 30 days

- **Factors for methodology:**
  - Health services in medically underserved populations (MUPs) and health professional shortage areas (HPSAs)
  - Mental health services in MUPs and HPSAs
  - Consultation with range of nursing interests
  - State factors, including: provider/population ratios, total number of providers, total number of only employed providers, number of families below 200 percent of poverty line, rates of infant mortality and low birth weight, percentage of population who are racial/ethnic minorities, percentage of population who are Hispanic, number of people who are in HPSAs and are members of MUPs, percentage of population who are elderly, extent of choice of providers, impact of care on hospitalizations and emergency room use, number of people who lack proficiency in English

DISCUSSION

- **Funding for workforce diversity –** Responding to a question from Dr Hanson, Dr. Geolot said that funding for nursing workforce diversity under Part C is not limited to nursing schools and can go to nonprofit organizations, such as the National Association of Hispanic Nurses for its program working with Hispanic youth.
- **Funding split for 3 programs** – Dr. Geolot told Dr. Bolton that the distribution of funding among the three programs has remained the same over the last five years, with diversity and basic nursing programs together receiving about 23 percent and advanced education programs receiving the remainder.
- **Workplace issues** – In response to questions from Dr. Chater about the Secretary's discretion to consider additional issues, Dr. Geolot said the law appears to "open the door" to a discussion about how to change the workplace to enhance nurses' job satisfaction. "If we want to make a difference in health care delivery, it seems to me we have to begin to focus on changing some of those workplace issues," Dr. Chater commented.

OVERVIEW OF PHASE I PROJECT

Len Nichols, PhD, Urban Institute

Dr. Nichols, an economist at the Urban Institute, gave an overview of the Phase I project in which he developed a funding allocation methodology. The process that he recommended, developed in consultation with the Phase I expert panel, is described in his July 1, 2000, report to the Division of Nursing (the full report and executive summary are available as background materials on the Center's Web site at *http://chpre.gmu.edu*). Following are the major points in his presentation:

Highlights of Phase I – The legislation grew out of frustration with the continual disagreements among interest groups/political factions within nursing and with the pressure competing nursing groups exert on Congress in using the line item appropriation process to allocate resources. The law required DoN to replace that process with a new methodology that must account for the intent and goals of Title VIII's Parts B, C, and D; the health care needs of the population; and nursing workforce needs. To help DoN in determining funding levels for nursing, the law mandated a panel of experts on nursing – "perceived to be strong stakeholders" in the funding allocation -- who, with the advice of an economist – Dr. Nichols – would "outline the options for the Division" and then "make recommendations about a process that seemed to make the most sense."

Challenges – Dr. Nichols described some of the challenges the panel faced during Phase 1's year-long series of meetings and discussions:

- **Panel composition** – The first major challenge was following the legislative dictate for the expert panel's membership: the "specific groups that had to be at the table and then by definition groups that were left out."
- **Lack of data** – The law includes a list of very detailed data items that must be taken into account, but that requirement "served to both frustrate and excite the various constituencies." The major challenge from the beginning was the lack of data on what staffing ratios should be in virtually all settings and the lack of studies that control for all factors, not only the number of nurses in a particular setting but also the number of other professionals and the nature of the workplace's organization. The legislation calls for a formula for allocating funds "and the formula requires numbers and those numbers turned out not to really exist." The lack of data and lack of multivariate studies led to the panel's conclusion that the funding allocation methodology to be developed in Phase II would require both a **qualitative** and a **quantitative** process.
- **Impact of DoN programs** – Because of inadequate funding, DoN has not evaluated the impact of its own programs on the quantity of nurses it has produced. [1] ** In short, "we don't know how

[1] ** Dr. Geolot added the following correction to the minutes: "DON has carried out several studies over the years to evaluate their programs in terms of their effectiveness and impact. We do collect information on the number of students enrolled, graduated or participated in funded programs. We also carry out the RN sample survey, which gives a national perspective on the workforce."

much it costs to grow a nurse in various ways" and therefore "we don't really know, necessarily, what the best way to spend our money is if the goal is to produce a certain kind of nurse for a particular setting."

- **Appropriate level of basic education** -- Another challenge was the lack of consensus on "the basic education that a nurse should have." Although at first it appeared obvious that a baccalaureate should be required, Dr. Nichols found that far more non-baccalaureate nurses are being produced and hired and that they are often earning the same entry-level salary as a baccalaureate – "a disconnect" between the nursing leadership and the nursing programs.
- **NACNEP's role** – Although the National Advisory Council for Nursing Education and Programs (NACNEP) had been established by Title VIII to bring together the leading experts on nursing workforce issues, Dr. Nichols noted that external groups did not always agree with NACNEP members' recommendations. So a new panel of experts would be created.

Lessons Learned – Dr. Nichols outlined lessons he learned from his work on the Phase I project, lessons that the Phase II Expert Panel should apply in its deliberations:

- **Separation of powers** – In order for the panel's work to be accepted and its recommendations to be implemented, authority has to be spread across all members, and the panel "has to speak for nursing as a whole." The separation of powers process has three elements:
    - *Specification of targets* – The first task is to identify goals and specify and define quantifiable targets. The goals and targets must be weighted based on relative values, and they must be linked to real population needs. Finally, assumptions should be clarified as they evolve.
    - *Political deliberation process* – Input into the process should be representative of all interest groups, both in terms of panel composition and opportunity for testimony from groups not on the panel. That input from panelists and outsiders has to be processed into defensible analytic decisions. Finally, the panel should consider implementation and transition strategies.
    - *Public comment and justification* **–** The panel should explain its priorities and its rationale for the decisions it makes.

- **Consensus points** – The Project I panel did reach broad consensus on certain things, which the Project II Expert Panel should build on during its work:
    - *Diversity* – The panel clearly agreed early on and throughout the process that "diversity [in the nursing profession] is a very important priority."
    - *Other funders' priorities* – In developing its own funding priorities, DoN must also consider the priorities and commitments of other funding entities.
    - *Need for more data* -- Although everyone eventually agreed that more data is needed, they also came to agree fundamentally that "quantitative analysis is no substitute for expert judgment."

- **Disagreements and uncertainties**– The panel had some lingering disagreements and uncertainties by the end of the process:
    - *DoN discretion vs. Congressional line item* – The tensions from competing interests "are probably endemic to democracy and will always be there."
    - *Baccalaureate vs. associate degree nursing* – The panel doesn't have to resolve this conflict, but it should form an opinion "in order to move forward in recommending certain types of training programs for certain types of nurses.
    - *Advanced practice interests vs. basic RN agenda* – The conflict between funding advanced practice programs and funding baccalaureate or basic RN programs "is going to be there forever" and is "always going to be important," but it "should be resolved only in the context of the broader set of funding sources across the nation."
    - *Relative weights* – Although the panel agreed on the importance of Parts B, C, and D, there was little consistency on what the relative weights among the three should be. That is the task of the Phase II Expert Panel.

DISCUSSION

- **Funding differentials** – In response to a question from Dr. Licona about the relative amount of money going to BSN versus AD training programs, Dr. Nichols said about two-thirds of all new nurses have associate degrees. He said that Medicare spends over $200 million annually on diploma nursing programs while DoN gets $76 million for all three programs. In total the nation spends more on associate and diploma programs than it does on baccalaureate and more on all of those in total than on advanced training programs. Dr. Nichols also noted that diversity is the lowest priority among all three parts. Dr. Anderson pointed out that most diploma programs have closed yet a lot of that money "is going to hospitals that no longer have diploma programs."
- **Different training/equal pay** – Dr. Atkinson asked about the conflict between the desire to have more baccalaureate nurses and the trend to pay them the same entry-level salary as nurses with diploma and associate degrees. The implication, he said, is "that the organizations hiring them consider them equally valuable." His comments led to a discussion among possible reasons for this conflict and potential solutions. One explanation is that there are simply more nurses at the associate degree level and that as diploma programs were phased out, associate degree programs grew more rapidly than baccalaureate programs. While Dr. Bolton noted that magnet hospitals do differentiate in wages on the basis of preparation, Dr. Foley said that most hospitals, except the magnets, don't make any distinctions between backgrounds in their job descriptions, especially at the entry level. "Until we can distinguish a difference in the positions, it will probably be very difficult to argue very convincingly that there needs to be a huge shift," Dr. Foley said.

OVERVIEW OF PHASE II PROJECT

Dr. Maddox

Dr. Maddox gave a brief summary of the six-step process the Phase II Expert Panel will be using to test the funding allocation methodology recommended in Dr. Nichol's report on Phase I (see PowerPoint presentation, available on the Center's Web site, http://chpre.gmu.edu, click on *Funding Methodology Project*. She described the specific tasks the Expert Panel is expected to accomplish during this first meeting and at subsequent meetings over the next nine months. Following are highlights of her presentation on the technical approach to the Phase II project:

6-Step Process Recommended

- identify major assumptions that define context of allocation decisions
- specify goals or target objectives – determine priorities placed on competing targets
- specify relevant constraints on DoN's pursuit of its objectives, e.g., the effects of DoN funding on the number of nurse practitioners or the impact of DoN funds on the number of employed RNs of any type
- derive "solutions" to specified problems, i.e., how much money to allot to Parts B, C and D
- quantitative, using numeric solutions with objectives and constraints
- qualitative, using informed collective judgment of the expert panel
- conduct sensitivity analysis, i.e., how solutions change if assumptions are different or wrong
- develop transition rules to minimize disruption

Recommended Qualitative Process

- get input from knowledgeable/representative group (Expert Panel)
- develop analytically defensible decisions on selecting /establishing input variables for testing the funding allocation method
- test methodology
- recommend adoption/implementation plan

Phase II Project Approach

- expert panel informs qualitative approach

- expert panel determines whether funding allocation methodology has merit to be implemented -- if so, specifies phased-in implementation plan
- expert panel submits report to Congress on its results and recommendations

1st Panel Meeting

- discuss/modify framework
- discuss current Title VIII goals in Parts B, C, and D and identify preliminary goals, given population and health care system needs
- identify sources of existing data for inclusion in defining framework factors
- identify data gaps
- begin to discuss assumptions to inform data gaps

2nd Panel Meeting

- review public comments
- consider testimony
- review framework factors (operational variables and data requirements)
- continue to identify assumptions (used in lieu of data)
- determine testing scenario requirements based on Title VIII program goals and adopted priorities

3rd Panel Meeting

- review public comments
- review results of funding allocations based on simulation tests
- identify inadvertent conceptual or data errors from simulations
- discuss simulation-generated allocation with previous DoN allocations
- discuss impact/merits of adopting methodology

4th Panel Meeting

- review public comments
- discuss impact/merits of adopting methodology
- determine recommended course of action for implementing proposed funding allocation methodology, if recommended
- review draft report and discuss overall content and findings for final report

ANALYTIC FRAMEWORK FOR TESTING METHODOLOGY

Dr. Maddox

Dr. Maddox described a preliminary conceptual framework, developed by the CHPRE technical team, to be used by the Expert Panel in testing the funding allocation methodology. The framework consists of five topical areas: context in which Title VIII programs operate; program implementation; social and community moderating factors; and nursing workforce intermediate effects and long-term effects. In her presentation to the panel, she further explained the components of the proposed analytic framework (available on the Center's Web site). "In order to test a funding allocation methodology, we really have to talk about the important factors that influence not only the supply and demand dimensions of the nursing workforce in the country, but also the myriad moderating factors which go into influencing how the system behaves.

One of the challenges facing the panel, Dr. Maddox said, "is that while in an academic world, we can isolate all of these [factors], ... in the real world, these operate together in an interactive and iterative manner...." The panel's task is not only to identify the factors but also to determine "how these items work together as a matrix to produce the workforce we see in the country and in particular we are hoping can be changed ... through Title VIII intervention," she said. In addition, the panel must identify the targets or end goals of workforce production to be achieved through Title VIII funding, both short-term or interim targets and long-range targets, Dr. Maddox said.

Contextual factors -- The focus of her presentation and the panel discussion that followed was on the seven contextual factors that influence nursing supply and demand and nursing practice: public health trends; sociodemographic trends; socioeconomic trends; health care financing trends; health systems delivery and organizing trends; nursing workforce supply and demands trends; and health promotion, disease prevention, treatment, and technology trends. These can be broken down further into supply-related factors and demand-related factors that interact with each other and are often used interchangeably:

- **Interrelated supply factors** -- nurse demographics; economic factors; nursing education – its nature and infrastructure; impact of other professions and interaction with nursing; nursing care delivery system; and health care delivery system.
- **Interrelated demand factors** – nursing education system; economic factors; health care delivery system; nursing care delivery system; other professions; demographics of U.S. population; and incidence and prevalence of health and disease (including those identified in the legislative language).

Long-term program effects – The framework includes interrelated factors relating to long-term program effects that the panel should consider in setting targets: RN workforce supply, both in aggregate and by specialty; workforce diversity; locus of employment; education programs, infrastructure and outcomes; salary and price stability in the marketplace; and public health outcomes.

Data sources – The GMU technical team has to date assembled 123 sources of data, including 90 unique sources that can be used to further define the factors the panel will consider during the process. Generally the data falls into the following categories: RN demographics; health care workforce supply/participation; health care delivery resources production/efficiency; population demographics; public health needs/characteristics; and economic conditions/trends. The team found a fair amount of data on nurse resources, including data relating to the nurse population and the nurse pipeline, and good data on the current demand for nursing personnel across delivery systems. But as Dr. Nichols said earlier, there are major gaps in data to link nursing contributions to population-specific health outcomes. Further, as cited by the advisory panel in Phase I, there is nothing to link the variables on population, health status and health services -- required by the law to be taken into account – with nursing workforce needs and "'there is no consensus on the optimal health provider mix nationally,'" Dr. Maddox said. This lack of data "probably represents the nexus of our single biggest challenge as we go about setting targets and defensible rationales for them," she said in concluding her presentation and gave the panel its first charge: to identify **the most important factors to consider in testing the funding allocation methodology.**

Panel Discussion and Decisions on Key Factors -- Mr. Chinoy then led the panel member in a discussion of the seven proposed contextual factors panelists suggesting revisions, clarifications, and additional factors that should be considered. Some of the major points brought up in the discussion: Dr. Anderson noted that there is a mismatch between DoN's mission and the funding of its programs. Because the funding DoN provides for nursing "is nothing ... compared to what's being spent at the state and local level" and in no way can do all that it is expected to do, she said, it might make more sense if the programs focused instead on "best practices." Dr. Bolton urged that the impact of work environment on nursing participation be included as a factor; Dr. Hanson added that unless nurses' job satisfaction is considered, "we're not going to retain the nurses" no matter how much is spent or how many are trained. Mr. Levin recommended that the panel take into account "the huge shift from hospital-based care to ambulatory care," including private practice on which there's virtually no data, and "the shift from acute care to chronic care," an area where studies show that nurses do a lot better than physicians and other professionals.

Dr. Chater stressed that in looking at these seven factors, the panelists should be "future oriented" and "creative in our thinking" and "not duplicating programs that already exist." Reiterating that point about a future perspective, GMU's Dr. Wakefield summarized the questions the panel needs to consider: "where do we want to take this U.S. health care delivery system" and what is the role of the nursing workforce in attaining that vision and "how do these three pieces B, C, and D ... through the leadership of the Division, help us get there?"

Mr. Chinoy asked the panelists to prioritize the relative importance of the three Title VIII programs (see below). The panel then returned to the list of factors. In the end the panel members decided on a list of 10

potential factors to guide their deliberations, although they will be asked at future meetings to make further modifications in the list and to weight the factors in order of priority. The factors (not in priority order) are:

10 Factors to Consider in the Testing of a Funding Allocation Methodology

1. Funding sources (other than DoN) for nursing workforce, education and development (both public and private) – new factor added by the panel
2. Health professions workforce (other than nursing) supply and demand trends – added by panel
3. Public health trends, including health promotion and disease prevention
4. Sociodemographic trends
5. Socioeconomic trends
6. Health care financing trends
7. Health services delivery and organizing trends, including work environment
8. Nursing outcomes and quality, including quality of nurses' work environment, errors, and patient safety – added by panel
9. Nursing supply and demand trends
10. Trends in technology that affect nursing workforce

SPECIFYING TITLE VIII GOALS AND TARGET OBJECTIVES

The relative importance of each of the three Title VIII programs, Parts B, C, and D, was discussed.

Panel Discussion on 3 Programs -- Much of the discussion centered on Part C, Increasing Diversity in the Nursing Workforce. While Dr. Anderson said that unless diversity is built into the other parts, "it isn't going to happen," Dr. Licona stressed that the diversity issue is so important it should "stand alone." "We can't go forward with the same workforce that we have currently in any of the health professions, but nursing specifically," he said. Dr. Chater emphasized that diversity needs to be increased in three areas: "people, programs, and delivery settings." It was also suggested that the issue of diversity should include age and gender.

On Parts B and D, some panel members expressed concern about the long-term future of advanced practice nursing if the federal money "goes completely in another direction" – no one else is funding advanced practice, Dr. Hanson said. But Dr. Foley stressed that unless enrollment in baccalaureate nursing is expanded, "we'll have no advanced nurses" who enter the profession at the baccalaureate level. Mr. Salsberg said that "basic nursing education and practice is really critical...and should clearly be receiving an additional, larger share of the available funding." Mr. Levin suggested that in looking at advanced practice nursing, the panel needs to look at the political issue of scope of practice at the state level. "As nurses take on more complex and highly technological responsibilities," he said, "they're pushing against other licensed or certified professionals" and then this leads to turf wars. "There are all kinds of reasons why you can train [nurses] up" to do more complex tasks "and why they're never going to get to do those things," Mr. Levin said. Drs. Bolton and Anderson brought up the issue of capacity in baccalaureate programs, concluding that many programs are turning away qualified applicants "because there is not enough funding for those individuals."

Ranking Title VIII Programs – To determine their preliminary thinking and to stimulate discussion at this stage of the panel process, Mr. Chinoy asked panel members to rank the three parts in terms of the relative level of emphasis. The results:

- Part C, Increasing Diversity in the Nursing Workforce – High Priority
- Part D, Basic Nursing Education and Practice – Middle Priority
- Part B, Advanced Education Nurses – Lower Priority

As the work of the panel continues, priorities will be informed as the funding methodology is tested using the simulations the panel will consider at future meetings.

IDENTIFYING IMPORTANT DATA SOURCES AND DATA GAPS

After identifying the 10 potential factors to consider in testing the recommended funding allocation methodology, the panel members were asked to determine which data sources are the most important to use in further defining these factors. Each panelist had received a list of existing data sources, compiled by the GMU technical team; the compilation (available on the Web site) included about 123 sources, 90 of which are unduplicated. In the end, the panel identified a list of key data needed for each factor, including areas where gaps may exist. The list of key data needs follows, with possible gaps indicated by asterisks.

1. Funding Sources (other than DoN) for Nursing Education and Development (public and private)
Key Data Needed:

- Source of funding and level of nursing education (Diploma, AD, BSN, MSN, Doctoral) by:
  - States **
    - State government
    - Industry
    - Geographic distribution (e.g., rural vs. urban)
    - Total number of nursing education programs and dollar amount for each education level
  - Federal Government
    - Agencies such as Department of Education, VA, IHS, HRSA (excluding DoN)
    - Medicare
  - Private Foundations

2. Workforce (other than nursing) Supply and Demand Trends **
Key Data Needed:

- Other health professions workforce
- Relationship between nursing workforce and other health professions
- Availability of other health professions and their impact on the nursing workforce (e.g., intensivists in ICUs, impact of hospitalist physicians)

3. Public Health Trends
Key Data Needed:

- Healthy People 2010 goals
- Current events/shifts (e.g., impact of bioterrorism)
- CDC and HRSA reports on public health infrastructure
- Degree to which health promotion, disease prevention activities are conducted by nurses
- Council on Education for Public Health/American Public Health Association
  - Definitions of health
  - Major public health trends

4. Sociodemographic Trends
Key Data Needed:

- Census data
- Healthy People 2010 health disparities by:
  - Age
  - Ethnicity
  - Geography
  - Gender
- Current career choice data for women (especially into other professions) – Bureau of Labor Statistics
- Generational values (career choices of different generations)
- Uninsured/underinsured data

5. Socioeconomic Trends
Key Data Needed:
- Widening income gap data by population groups
- Census data
- Workforce participation data
- Uninsured/underinsured data

6. Health Care Financing Trends
Key Data Needed:
- Number of small employers who have stopped providing health insurance to employees
- Medicare and Medicaid's role in financing nurse education
- Managed care penetration and retreat patterns
- Private payer data
- Migrant and community-based clinics' financing of nurse education and ability to attract health workforce
- Uninsured
- Impact of health care financing trends on supply and demand (e.g., home care financing's influence on supply of home care nurses)

7. Health Services Delivery and Organizing Trends (including work environment)**
Key Data Needed:
- Type and location of health services
- Organization of care
    - Skill mix/staffing mix
    - Anecdotal models of care delivery
    - Horizontal and vertical integration of delivery systems
    - Corporate culture (e.g., extent to which magnet hospital nurses are involved in decision-making)
    - Shift from primary care nursing
    - Paperwork

8. Nursing Outcomes and Quality (including quality of work environment, errors and safety)**
Key Data Needed:
- *Nurse Staffing and Patient Outcomes in Hospitals*, Needleman et al. (February 2001)
- HEDIS (nurse case management as it relates to improved outcomes)
- IOM Reports, *To Err Is Human* (1999) and *Crossing the Quality Chasm* (2001)
- Research on how different health professions affect health care outcomes
- Data on medication errors

9. Nursing Supply, Demand and Distribution Trends**
Key Data Needed:
- Supply, demand, and distribution of nurses by education level, practice site, ethnicity
- HRSA supply and demand models
- Indices on retention and turnover
- Vacancy rates
- Nurse satisfaction
- Scope of practice and impact on access to care

10. Technological Trends and Their Impact on the Nursing Workforce **
Key Data Needed:
- Degree to which technology is being used across settings to ease nurse workload
- Empowerment of nurses
- Influence of technology on distance education for nursing
- Computer literacy for RNs

- Curriculum trends
- Impact of regulation on use of technology

PUBLIC COMMENTS

- **Karen Fennell, Senior Policy Analyst, American College of Nurse-Midwives**
    - Key points
        - Scope of practice for midwifery is opposed by AMA.
        - Over the past 13 years, midwifery schools grew from 13 to 47.
        - Midwifery practice has shifted away from the hospital setting.
        - ACNM is collaborating with ACOG and AAFP in recognizing midwifery.
        - ACNM membership is at 7,000 certified midwives (90% of the midwifery workforce).
        - A major barrier to practice is admitting privileges, ACNM is using the courts to resolve disputes.
        - Managed care panels pose another barrier.
- **Jan Towers, American Academy of Nurse Practitioners**
    - Key points
        - NPs are increasingly admitting patients to hospitals, have hospitalist roles.
        - NPs mainly provide primary care in a medical framework, delivered differently from traditional nursing.
        - The health needs of the population has a primary care focus and a nursing role.
        - NPs could be serving in more underserved areas as they are cost effective and provide high quality care.
        - NPs have a reputation for working with the underserved
        - NPs have potential roles and really could be cost effective, but it is hard to get projection data.
- **Lorraine Jordon, Director of Research, American Association of Nurse-Anesthetists**
    - Key points
        - There are 28,000 CRNAs administer 65% of the total anesthesia and 75% in rural America.
        - Requirements include an earned graduate degree (average 28 months in length) after basic baccalaureate education with an RN license.
        - There is a shortage of anesthesia providers largely due to de-centralization of health care services.
        - Anesthesia assistants (AAs) total 600 in the US and are seen as a solution to the shortage of anesthesia providers by the American Society of Anesthesiologists.
        - There are between 23 to 26 qualified applicants for every one space in nurse anesthesia programs, the major barrier is clinical sites and clinical access.
        - Federal funding for nurse anesthesia programs has an impact on getting programs started at the hospital/university setting.
        - The leadership of the DoN has been very helpful in the past in getting programs started.
        - 46% of CRNAs are male and we have studies on why anesthesia is more diverse.
        - CRNAs tend to stay where they are educated, so we need to establish role models at the diverse population sites.
- **Melinda Ray, Association of Women's Health, Obstetric and Neonatal Nurses**
    - Key points
        - AWHONN represents NPs CNMs and RNs and is deeply committed to enhancing the diversity of its membership.
        - Birth is a richly cultural experience and our membership does not represent that rich background of different cultural areas and issues.
        - AWHONN is interested in the specialty association's role in mentoring and leadership to enhance diversity.

- **Polly Bednash, Executive Director, American Association of Colleges of Nursing**
  - Key points
    - AACN represents baccalaureate and graduate programs, a total of 560 institutions in the U.S.
    - There is a wide range of issues that are either affected by nursing or themselves affect nursing practice and supply.
    - The inductive process has led to a lively discussion about data and ideas, I would hope that attention is paid to the deductive phase of this process.
    - The reason we are here is because of a failure of the political process.
    - No other federal agency or other profession has to develop a process to allocate funds-and has the potential to have dramatic effects on how resources are used.
    - There is an important opportunity in this process—a series of recommendations about the importance of data to make good decisions about nursing and its contribution to health care.
    - This panel could make important recommendations to other communities, associations about collecting data on nursing
    - For example, the Department of Education administers large block grants to community colleges (where many nurses are educated), but there is no reporting requirement on how those funds are spent.
    - AACN supports the work of the DoN, the Expert Panel, and organizations present, and we have large data sets we would like to make available

MEETING SUMMARY AND NEXT STEPS

Drs. Wakefield, Maddox and O'Grady

Dr. Maddox outlined what the GMU team will do to prepare for the next meeting. In addition to investigating the availability of additional data requested by the panel, GMU staff will revise the framework based on the panel's discussion, match available data to inform identified areas of interest, and identify additional data gaps. The team will also be constructing scenarios for testing the funding allocation model -- possibly three scenarios, each reflecting different conditions or factors. At the next meeting, the panel will begin to consider the different scenarios and start to develop targets for the Title VIII programs. For example, on the issue of diversity, the panel would discuss targets it might envision for diversity for DoN's programs. The meeting was adjourned until the next Expert Panel Meeting on January 30, 2002.

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