EXECUTIVE SUMMARY AND OVERVIEW

The Nursing Center Model of Health Care for the Underserved

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Full report is available upon request and may be cited as:

**STUDY BACKGROUND**

Nurse-managed health centers are health centers directed by nurses in partnership with the communities that they serve. Nurse-managed health centers address health disparities by providing accessible comprehensive primary care and community health programs aimed at health promotion and disease prevention. Care is primarily provided by nurse practitioners, with support from an interdisciplinary team of health professionals, including registered nurses, health educators, community outreach workers, and collaborating physicians.

In 2002 the National Nursing Centers Consortium (NNCC), an organization comprised of community-based nurse-managed health centers, received a grant from the Centers for Medicare and Medicaid Services (CMS) through a mandate under Public Law 107-116 to conduct a rigorous evaluation of nurse-managed health centers in Pennsylvania to document the ability of this type of health center to serve as safety net providers.

The Fiscal Year 2002 budget appropriation language for CMS (Public Law 107-116), as well as the accompanying conference committee report, included the statement that, "$100,000 is for the Regional Nursing Centers Consortium\(^1\) in Philadelphia to initiate a demonstration project to evaluate 15 nurse-managed health centers in urban and rural areas across Pennsylvania." In response to the Senate language, the National Nursing Centers Consortium (NNCC) developed a proposal and received a grant from CMS with the following two objectives:

1. To create an extensive descriptive evaluation of clients served and services provided at 15 primary care nurse-managed health centers in Pennsylvania\(^2\), and
2. To compare select population-based measures of quality and health care resource utilization of nurse-managed health centers to those of like providers including Community Health Centers.

Meeting these objectives answers a specific challenge: to provide documentation of the ability of nurse-managed health centers to serve as core safety net providers in the U.S. health care system.

According to the Institutes of Medicine (IOM), safety net providers have two distinguishing characteristics: (1) either by legal mandate or explicitly adopted mission, they offer care to patients regardless of their ability to pay for those services; and (2) a substantial share of their patient mix are uninsured, Medicaid,

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\(^1\) NNCC was initially established in 1996 as the Regional Nursing Centers Consortium. It is the first and largest organization representing nurse-managed health centers in the United States.

\(^2\) Due to administrative changes that precluded participation in this evaluation, four health centers ultimately had to be eliminated from the original 15, leaving 11 health centers for the evaluation.
and other vulnerable patients. The core safety net providers, as listed in the Institute of Medicine summary, are: Community Health Centers (CHCs), Federally Qualified Health Centers (FQHCs), public hospitals, and local health departments. Missing from this list are nurse-managed health centers, despite their long history of providing low-income, medically underserved, vulnerable populations with high quality health care services.

**STUDY FINDINGS AND DATA IMPLICATIONS**

**Demographics of Nurse-Managed Health Center Patients:**

- In urban nurse-managed health centers, patients are predominately African-American (more than 85% of patients served).
- In the migrant nurse-managed health center that was studied, the vast majority (greater than 95%) of patients served are Hispanic.
- In the rural nurse-managed health center that was studied, nearly all of the patients served are White. Patients in this nurse-managed health center are older, and males 45-64 years of age constitute the largest group of patients.
- Patients of suburban nurse-managed health centers are most racially and ethnically diverse. Approximately 38% of patients are African-American, 35% are Hispanic, 21% are White and 5% are Asian.
- **Overall demographic patterns:** Urban, Suburban, and Migrant centers serve a large proportion of children and youth under the age of twenty, which constitutes 45% of their patient base. One quarter of patients are young adults, between twenty and twenty-nine years of age. Overall, 61% of patients are female.

**Implications:** The data suggest the centers are reaching these underserved populations at critical times to provide preventive health: particularly at childhood, adolescence, and young adulthood as well as through later life stages. The term “nurse-managed health center” is often mistakenly associated with nursing homes, which primarily serve seniors. The findings show that nurse-managed health centers serve a diverse population through all age groups with a large focus on children and youth, suggesting the centers are getting services to underserved populations at an early age critical to providing preventive health.

**Insurance Status of Nurse-Managed Health Center Patients:**

- Of the patients seen at all nurse-managed health centers 35% were uninsured; 40% received Medicaid, 17% had commercial health insurance and 9% received Medicare benefits.
- In the migrant nurse-managed health center, 99% of the population served was uninsured.
Implications: The findings suggest that nurse-managed health centers meet the IOM’s definition of safety net provider. Insurance status is an indicator of economic status and well-being. This confirms that a substantial share of the patient mix at nurse-managed health centers is uninsured or on Medicaid, demonstrating the vulnerability of the people served.

Employment Status of Nurse-Managed Health Center Patients:

- Of the urban patients seen in nurse-managed health centers, 53% reported being employed, 33% reported being unemployed, and 14% reported being students. Patients who were employed were less likely to have insurance than those unemployed.

Implications: Nurse-managed health centers provide care to vulnerable populations. The findings suggest that patients are minorities who if unemployed have higher access to insurance through Medicaid than employed, who are less likely to be insured. Lack of access to health care is an indicator of poor economic status.

Diagnoses and Services in Nurse-Managed Health Centers:

- Preventive Health constituted the largest diagnostic category, followed by Reproductive Health and Behavioral Health.
- Among Urban, Suburban, and Migrant centers, analysis revealed Behavioral Health to be the most frequent health disparity diagnosis, followed by Hypertension, Diabetes, Asthma, and Obesity.
- Asthma-related diagnoses represented 32% of all Pulmonary diagnoses; Hypertension represented 77% of all Cardiovascular diagnoses; and Diabetes 69% and Obesity 25% of all Metabolic diagnoses.
- At the Rural Center, the top three diagnoses were Respiratory-related, Hypertension, and Diabetes.

Implications: Health disparities are prevalent among vulnerable populations. Since the uninsured and underinsured populations are affected most significantly by health disparities, the NNCC considered the health conditions associated with these disparities in the analysis. The evaluation found that nurse-managed health centers serve a population impacted by health disparities and perform a broad range of diagnoses and procedures, many of which address health disparities directly. Therefore, the findings suggest that nurse-managed health centers meet the IOM’s definition of safety net provider by serving vulnerable populations.
Enabling Services in Nurse-Managed Health Centers:

- One hundred percent of nurse-managed health centers provided health education and environmental health risk reduction; 89% provided outreach, transportation, interpretation and translation services, and eligibility assistance; 78% provided home visiting and case-management; and 67% provided parenting education.
- Other services include: discharge planning; nursing home placement; and special education. Additionally, the health centers offer services such as summer camp, grand parenting education, food assistance, blood pressure and stroke screening, adolescent support groups, family planning, dentistry, podiatry, prenatal care, and fitness and nutrition programs.

Implications: Nurse-managed health centers provide similar enabling services as community health centers/federally qualified health centers without the same level of funding. In many instances they are providing expanded enabling services to meet the needs of their communities.

Patient Satisfaction in Nurse-Managed Health Centers:

- Patients were surveyed using the Medical Outcomes Trust Patient Satisfaction tool. Analysis of questions pertaining to patient access to health care and manner of health care delivered to patients by their primary care providers, showed mean aggregate scores, ranging from 4.03 to 4.19 on a 5 point-scale. A score of 5 indicates “excellent”, and a score of 1 indicates “poor”.

Implications: Findings suggest that patients were highly satisfied with the accessibility and delivery of care at nurse-managed health centers. This finding coincides with existing literature, which has shown that patients have consistently rated their satisfaction with care from nurse practitioners as high.

HEDIS Measures and Utilization Rates in Nurse-Managed Health Centers:

- The comparison analysis focused on several specific HEDIS (Health Plan Employer Data and Information Set) measures and utilization measures.
- On the measures included, nurse-managed health centers had higher rates of generic medication fills and lower rates of hospitalizations than like providers, such as community health centers.
- In addition, nurse-managed health centers had a higher patient retention rate.
• Nurse-managed health centers demonstrated parity in the rate of emergency room visits per 1000 members and use of appropriate medications for people with asthma.
• Nurse-managed health centers had a lower annual prevalence of chlamydia screening.

Implications: These findings are an indicator of the quality of care provided by nurse-managed health centers. Their performance rate was very similar on key measures to other recognized safety net providers, such as community health centers and federally qualified health centers, which served as the comparison base.

Financial Reimbursement for Nurse-Managed Health Centers:
• On average, 37% of the health center revenues come from Medicaid-managed care plans, 23% from private foundations, 23% from government contracts and grants, 6% from private donors, 6% from Medicare and 5% from private pay or other sources.
• Five of the participating nurse-managed health centers have been successful in receiving federally qualified health status. As such, these five health centers receive a higher level of funding from the government and a lower level of funding from foundations than other nurse-managed health centers.
• However, the remaining health centers have a high dependence on private foundation funding for their uninsured and Medicaid managed care for their Medicaid patients.

Implications: The nurse-managed health centers that have been successful in competing for and qualifying for community health center/federally qualified health center status are the most financially stable health centers and most apt to continue to serve as a safety net providers. The majority of nurse-managed health centers has not received this status and continues to seek sustainability.

Overall Study Conclusions

1. Nurse-Managed Health Centers are Safety Net Providers: Like IOM defined safety net providers, this evaluation found that nurse-managed health centers deliver a significant level of health care to the uninsured, Medicaid and other vulnerable patients. Consistent with their mission to offer care to patients regardless of their ability to pay, nurse-managed health centers give care to great number of uninsured clients with limited ability to pay for their care. Nurse-managed health centers are clearly safety net providers.
2. **Nurse-Managed Health Centers Provide a Medical Home for the Underserved:** Like IOM-defined safety net providers, nurse-managed health centers provide a full range of health care services, including primary care, preventive care, like health education and disease prevention, and behavioral health care. The evaluation findings clearly show that nurse-managed health centers deliver a significant level of health care to the uninsured, Medicaid and other vulnerable patients.

3. **Nurse-Managed Health Centers Struggle Financially and Need Cost-Based Reimbursement to be Sustainable:** The major obstacle nurse-managed health centers face is the struggle for financial sustainability. The comprehensive primary care and enabling services offered by these providers, as evidenced in this report, rarely generate enough funds to cover their costs. Furthermore, the unique payer and patient mix of nurse-managed health centers, which includes a large number of uninsured and Medicaid patients precludes the flexibility to shift costs. In contrast, community health centers, which receive cost-based reimbursement for its Medicaid and Medicare patients, in addition to grant funds to serve uninsured, have a greater ability to sustain their operations. Thus, nurse-managed health centers need cost-based reimbursement to be sustainable.

4. **Nurse-Managed Health Centers should be Recognized as Safety Net Providers and are Viable Partners with the Federal Government to Reduce Health Disparities:** The data demonstrate that nurse-managed health centers are instrumental in addressing and eliminating health disparities and should be formally recognized as core safety net providers, equivalent to community health centers. Currently, the government under-utilizes nurse-managed health centers as safety net providers. Given federal recognition, nurse-managed health centers could achieve financial parity with like providers, allowing them to serve as a safety net model of community-based primary health care and health promotion. Thus, nurse-managed health centers are in a unique position to be a partner with the federal government to increase access to health care services and reduce health disparities.