The Contribution of Nurse Practitioners and Physician Assistants to Generalist Care in Washington State

**Importance:** Despite widespread acceptance, and growth in numbers of non-physician clinicians (NPCs) such as nurse practitioners (NPs) and physician assistants (PAs), most estimates of medical provider shortage have remained focused on physicians. The total contribution to care made by NPCs is not well understood. In this study, we used productivity data from the NPC and physician populations in Washington State to assess the contribution to generalist care made by PAs and NPs. We paid particular attention to their role in rural and underserved areas of the state and to the contribution of women NPCs to the total generalist care provided by women.

**Study Design:** Washington State health provider license renewal data on demography, medical specialty, place of practice, and outpatient visits performed were used to estimate the productivity of generalist physicians and generalist NPCs. Counts of physicians, NPs, and PAs and the outpatient visits they performed were adjusted for missing data and then converted into family physician full-time equivalents (FTEs) to facilitate comparisons and estimation of total contribution to care made by each provider type. It is recognized that this measure of productivity does not take into account the content of care and scope of practice differences among these professions.

**Major Findings:**
- **Overall,** NPCs provide about 21 percent of the generalist outpatient visits in Washington State. NPC contribution is higher in rural areas of the state (24.7% of visits) and a bit lower in urban parts of the state (20.1%). (See Figure.)
- **When actual productivity data were examined and converted into family physician FTEs,** the “discounting” was severe. 4189 generalist physicians produced only 2781 family physician FTEs (1 FTE = 105 outpatient visits per week). NP and PA discounts were also severe. The 699 generalist NPs in Washington State produced 330 family physician FTEs, and the 581 generalist PAs produced 411 family physician FTEs.
- **In rural areas,** NPCs performed about half of the visits provided by female providers. Female physicians made a larger contribution in urban areas, where NPCs provided only about 36.5 percent of the generalist care provided by women.
- **NPCs made similar contributions to total care in rural Health Professional Shortage Areas compared to rural non-shortage areas.**

**Policy Implications:**
To be accurate and meaningful, estimates of available generalist care must include the contribution of NPs and PAs. Additionally, simple head counts of licensed providers will result in substantial over-estimates of available care. Actual productivity data or empirically derived discount factors must be used for accurate estimation of provider shortages.

*Findings are more fully described in WWAMI CHWS/RHRC Working Paper #64: Larson EH, Palazzo L, Berkowitz B, Pirani MJ, Hart LG. The Contribution of Nurse Practitioners and Physician Assistants to Generalist Care in Underserved Areas of Washington State. June 2001. This study was jointly sponsored by the WWAMI Center for Health Workforce Studies and the WWAMI Rural Health Research Center.*