

Quality of Care Provided by Advanced Practice Registered Nurses (APRNs)

Nurse Practitioners (NPs)

- In a review of studies comparing the primary care provided by NPs to primary care provided by physicians (MDs), researchers found that patients of both groups had comparable health outcomes. NPs were found to out perform MDs in measures of consultation time, patient follow-up, and patient satisfaction (Naylor and Kurtzman 2010).
- Two recent international systematic reviews report no differences between patients treated by NPs and MDs in terms of health outcomes, type of care provided, or resources used. They also found patients seeing NPs were more satisfied and had longer consultations (Horrocks et al., 2002; Laurant et al., 2008).
- A cross-sectional analysis found that patients of NPs and physician assistants (PAs) who have experience treating HIV, fared as well or better than those cared for by any physician specialty (Wilson et al., 2005).
- In a randomized trial, researchers found that primary care outcomes of NPs in ambulatory care settings are comparable to MDs when NPs have the same level of authority, responsibilities, productivity and administrative requirements. A two-year follow up found no significant variation in health outcomes, health services utilization, or patient satisfaction between patients from the original study receiving primary care from NPs versus MDs (Mundinger et al., 2000; Lenz et al., 2004).

Certified Nurse Midwives (CNMs)

- A cross-sectional analysis of all U.S. births in 1991 attended by either a physician or CNM found that, among singleton, low risk vaginal births, outcomes were significantly better under CNM care. After adjusting for risk factors and socioeconomic status, CNM-attended births had a 19% reduced risk of infant mortality, a 33% reduced risk of neonatal mortality, and an average birthweight that was 37 grams greater, compared to physician-attended births (MacDorman and Singh, 1998).
- A case control study comparing care at collaborative management birth centers (where CNMs provide 95% of prenatal and birthing care to low-risk women) and traditional birthing centers (managed by MDs at hospital clinics or private practice) found that, for low-risk women, outcomes were equivalent. The study also found that the collaborative centers required fewer operative deliveries and used fewer medical resources (Jackson et al., 2003).
- A meta-analysis of 11 trials comparing midwife-led (i.e. CNM) pregnancy and birthing care with traditional care models concluded that CNM care is associated with reduced rates of fetal loss before 24 weeks gestation, reduced antenatal hospitalization, shorter newborn hospital stays, and an increased sense of control during labor, without any reduction in maternal or child health (Hatem et al., 2008).

Certified Registered Nurse Anesthetists (CRNAs)

- A case control study across 369 hospitals nationwide found that hospitals that used only CRNAs in obstetric care performed at least as well as hospitals that used anesthesiologists only on measures of anesthesia-related deaths, complications, and trauma during delivery (Needleman and Minnick, 2009).
- A case control study in Pennsylvania hospitals looking at outcomes among Medicare patients found that patients treated by non-anesthesiologist directed CRNAs had 2.5 more excess deaths and 6.9 more failure-to-rescue deaths (e.g., death following complications) per 10,000 patients than patients treated by an anesthesiologist (Silber, 2000).
- A 22-state case control study of Medicare patients found no difference in outcomes between CRNAs and anesthesiologists working alone or as part of a care team. (Pine et al., 2003).

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