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ScienceDirect
Nurs Outlook 63 (2015) 144–153
Nursing Outlook
www.nursingoutlook.org

Practice characteristics of primary care nurse practitioners and physicians

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ARTICLE INFO

Article history:
Received 23 April 2014
Revised 12 August 2014
Accepted 20 August 2014
Available online 23 August 2014

Keywords:
Nurse practitioner practice characteristics
Primary care
Primary care nurse practitioners

ABSTRACT

Background: Projections of physician shortages, an aging population, and insurance expansions have increased interest in expanding the number of primary care nurse practitioners (PCNPs) in the United States. Although information about the number and distribution of nurse practitioners is known, there is little information about the practice characteristics of PCNPs. The purpose of this study was to identify demographic and practice characteristics of PCNPs and compare these characteristics with primary care physicians (PCMDs).

Methods: From November 23, 2011, to April 9, 2012, we conducted a national postal mail survey of 972 clinicians (467 PCNPs and 505 PCMDs). Questionnaire domains included compensation and billing practices; characteristics of patients treated; PCNPs' use of their own National Provider Identification number to bill services; how PCNPs spend their time; clinical and nonclinical activities performed; and whether PCNPs have privileges to admit, round on (i.e., oversee the care provided to) patients, and write orders independently of physicians. The response rate was 61.2%.

Discussion: PCNPs are more likely than PCMDs to practice in urban and rural areas, provide care in a wider range of community settings, and treat Medicaid recipients and other vulnerable populations. Not only do most PCNPs work with PCMDs, but also the majority of both clinicians believe that increasing the supply of PCNPs will result in greater collaboration and team practice. Although PCNPs and PCMDs deliver similar services and spend their time in nearly identical ways, PCNPs work less hours and see fewer patients, and only a handful of PCNPs have their salary adjusted for productivity and quality performance. PCNPs cite government and local regulations as impeding their capacity to admit and round on patients in hospitals and long-term care facilities and write treatment orders without a physician cosignature.

Conclusions: Significant differences in demographic and practice characteristics exist between PCNPs and PCMDs. Whether working independently or with

Supported by the The Robert Wood Johnson Foundation, Gordon & Betty Moore Foundation, and Johnson & Johnson Campaign for Nursing's Future.

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http://dx.doi.org/10.1016/j.outlook.2014.08.008

PCMDs, increasing the number of PCNPs can be expected to expand access to primary care, particularly for vulnerable populations, and for those gaining access to health insurance through the Affordable Care Act.

Cite this article: Buerhaus, P. I., DesRoches, C. M., Dittus, R., & Donelan, K. (2015, APRIL). Practice characteristics of primary care nurse practitioners and physicians. Nursing Outlook, 63(2), 144-153. http://dx.doi.org/10.1016/j.outlook.2014.08.008.

Introduction

Health care stakeholders, including primary care clinicians, policy makers, and researchers, have suggested that increasing the supply of nurse practitioners (NPs) and physician assistants (PAs) could help mitigate the negative consequences of expected primary care physician (PCMD) shortages (Iglehart, 2013; Institute of Medicine, 2010; Ku, Jones, Shin, Bruen, & Hayes, 2011; National Governors Association, 2012). Shortages of PCMDs are expected to reach 45,000 by 2020 and grow to 66,000 by 2025 (Association of American Medical Colleges, 2011). The prospect of PCMD shortages has become an increasing concern in light of the expected increased demand for primary care services that is driven by population growth, an aging and sicker population, and insurance expansions under the Affordable Care Act (Health Resources and Services Administration, 2013). The interest in increasing the NP workforce as one means of expanding the capacity of the primary care workforce is fueled, in part, by the fact that NPs can be educated more quickly than PCMDs and because, according to many studies, NPs provide comparable quality on many dimensions of primary care (Cooper, 2001; Horrocks, Anderson, & Salisbury, 2002; Laurant et al., 2005; Mundinger et al., 2000; Newhouse et al., 2011; Sackett, Spitzer, Gent, & Roberts, 1974; Venning, Durie, Roland, Roberts, & Leese, 2000). Prior research by our team documented that Medicare beneficiaries who received their primary care from a primary care NP (PCNP) were more likely to be female, to be dually eligible for Medicare and Medicaid, to have qualified for Medicare because of a disability (DesRoches et al., 2013), and to cost less than care provided by PCMDs for comparable patients (Perloff, DesRoches, & Buerhaus, 2014).

In 2010, there was an estimated 56,000 PCNPs, which is about half of the total NP workforce and approximately 19% of the overall primary care workforce in the United States (Agency for Healthcare Research and Quality, 2013; Dower & O'Neil, 2011). A survey of the NP workforce conducted 2 years later by the Health Resources and Services Administration estimated 60,407 PCNPs were working in primary care practices or facilities in 2012 (Health Resources and Services Administration, 2014). The per capita supply of NPs is larger in the 16 states with the least restrictive scope of practice regulations compared with the states that restrict NP practice (Reagan & Salsberry, 2013). Although both PCNPs and PCMDs agree that there is a national shortage of PCMDs, they disagree about the role that PCNPs should play in the leadership of clinical practice. PCMDs also express reservations about whether the quality of care will be positively affected with further expansions of the PCNP workforce (Donelan, DesRoches, Dittus, & Buerhaus, 2013). These disagreements, together with incomplete data on the current practice characteristics of PCNPs, leave policy makers uncertain about the contributions of PCNPs, their impact on access to care, and how PCNPs can optimally fit within a rapidly evolving primary care delivery system.

The 2012 National Survey of Primary Care Nurse Practitioners and Physicians was conducted, in part, to help address these uncertainties. This article provides descriptive data from the survey that address the following questions: (a) What are the demographic, education, and employment characteristics of PCNPs and PCMDs? (b) Are there systematic differences in the characteristics of the patients treated by these two groups of clinicians? (c) What are the billing practices of PCNPs and PCMDs, and how do these practices vary by practice organization characteristics? (d) Are there differences in how PCNPs and PCMDs spend their time and in the care delivery activities they provide?

Methods

The 2012 National Survey of Primary Care Nurse Practitioners and Physicians was conducted by postal mail survey from November 23, 2011, to April 9, 2012. Eligibility for the survey was restricted to clinicians who were licensed NPs or physicians, trained in a primary care specialty, actively working in primary care practice, and providing direct patient care services. Detailed methods have been published previously (Donelan et al., 2013).

Samples

Samples of PCNPs and PCMDs were obtained from the Nurse Practitioner Masterfile (PCNPs) and the American Medical Association Masterfile (PCMDs) from Medical Marketing Service, Inc. Physicians were randomly selected from the American Medical Association Masterfile, a comprehensive listing of all licensed physicians in the United States. We selected direct patient care physicians in an eligible specialty (general practice, family practice, internal medicine, general internal medicine, adolescent